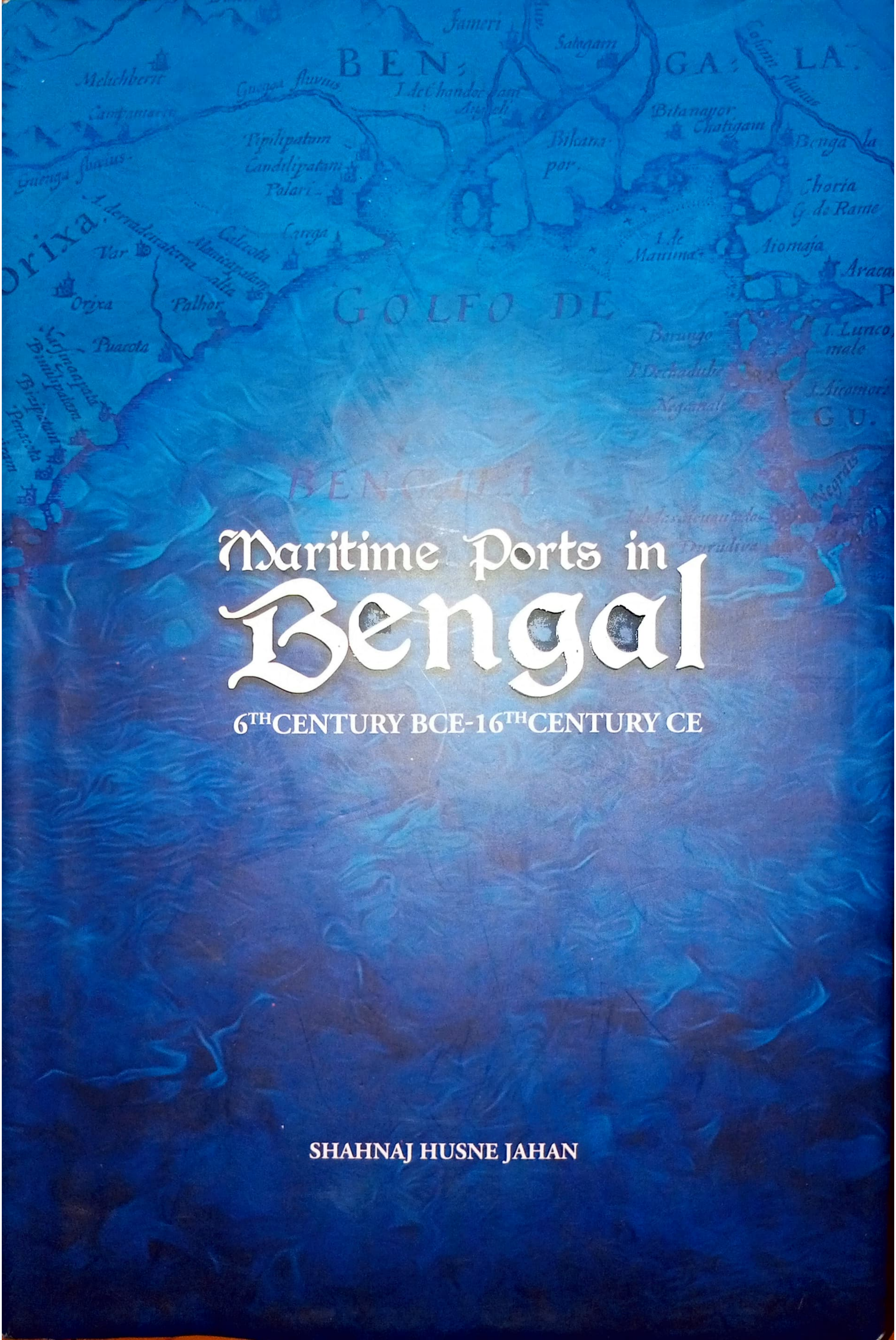
BEN GA LA
Jameri
Satigam
Melichberit
Campanaris
Ganga fluvius
I. de Chandecan
Pipilipatam
Candilipatam
Palari
Bilanapor
Chatigam
Bengala
Bilana por
Chorla
G. de Rame
Orixa
I. de Mauina
Aiomaja
Aracan
GOLFO DE
BENGALA
Barungo
Negamale
G U.
Negrais

Maritime Ports in Bengal

6TH CENTURY BCE-16TH CENTURY CE

SHAHNAJ HUSNE JAHAN

Maritime Ports in Bengal
6th Century BCE-16th Century CE

Shahnaj Husne Jahan

CenHerSt
Centre for Heritage Studies (CenHerSt)

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Tangon Publication

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There are seven seas from Siraf on the Persian Gulf to Khanfu (Canton) on the North China Sea. Or, at least, that is how the Arab and Persian mariners and merchants referred to their maritime world of the Indian Ocean trade in the early medieval period. The image has stuck to folk and fairy tales of Bengal. When my grandmother told me these stories as a child — stories of Sindabad and Saiful Muluk sailing across the seven seas and thirteen rivers, or when Hemantakumar Mukhapadhyaya sang his famous song about the princess who lives beyond the seven seas and thirteen rivers — those seas held a mystery I could never fathom.

The last twenty-three years, I have devoted most of my time to studying maritime trade of pre-modern Bengal as well as to rediscover my identity. I feel, as though, I have voyaged across the seven seas to pre-modern Bengal. It was at Deccan College Post-Graduate and Research Institute, Pune, India that I was introduced to maritime archaeology. The milieu of Deccan College, far from maddening crowds, has always and unfailingly offered me shades of solitude and silence that allowed me to dream my voyages. I feel most honoured to have been a part of this milieu, of being nurtured by a host of distinguished scholars who teach here and to have spent endless hours at one of the richest libraries for research. I bow with reverence to all my teachers of Deccan College, especially Professor K. Paddayya, Professor V.N. Misra, Professor S.N. Rajaguru, Professor V.S. Shinde, Professor R.K. Mohanty, and Professor P.P. Joglekar for their wisdom and kindness. I am also deeply indebted to my teachers Professor Mamtazur Rahman Tarafdar, Professor Perween Hasan, Professor Habiba Khatun, and Professor Md. Shamsul Huq of the University of Dhaka who introduced me to medieval art history, culture and archaeology. I am grateful to the Board of Trustees of the University of Liberal Arts Bangladesh (ULAB), where I have been teaching South Asian history, culture and archaeology courses since 2006, for having faith in my research. I thankfully acknowledge the cooperation I received from my colleagues and students of ULAB.

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As storehouses of wisdom, libraries complement museums and I have been fortunate in having been able to visit some rare collections held in a number of museums and private collections. I offer my heartfelt gratitude to the authorities and staff of the following museums for granting permission to study their collection and take photographs: site museums of the Department of Archaeology under the Ministry of Cultural Affairs, Government of the People's Republic of Bangladesh at Mahasthangarh, Mainamati, and Paharpur, Bangladesh National Museum (Dhaka), Private collection of Muhammad Habibullah Pathan (Bateshwar, Narsingdi) in Bangladesh; Asutosh Museum of Indian Art and Indian Museum (Kolkata, West Bengal) in India; National Museum (Yangon), Bagan Archaeological Museum and Srikshetra Archaeological Museum in Myanmar; National Museum (Bangkok), Phra Pathom Chedi National Museum (Nakhon Pathom), U-Thong National Museum (Suphanburi), Ban Kao National Museum

Introduction

As the title of this book *Maritime Ports in Bengal* implies, the maritime ports of the geographical region that is examined in it is 'Bengal' (Fig. 1). Undoubtedly, the region is an anomaly because it is politically non-existent today. What exists is an independent country called Bangladesh and a component state of the Union of India, known as West Bengal. Bangladesh, which was the eastern wing of Pakistan, emerged as an independent country in 1971 after a bloody civil war. The eastern wing of Pakistan and West Bengal in India were politically divided during the partition of British India in 1947. Before the partition, Bengal was a province of British India and its territorial limit extended from the foot of the Himalayas in the north to the Bay of Bengal in the south and from the Brahmaputra in the east to the lower reaches of the Suvarnarekha in the west. Hence, any study of pre-1947 Bengal must include within its scope the entire area of West Bengal and Bangladesh. This is all the more imperative if one remembers that most of the area within the boundaries of West Bengal, India and Bangladesh has been considered a political unit since the Mughal period. Known as *Subah Bangalah* to the Mughals, the territorial extent of the unit included, beside British Bengal also the *Sarkars* of Sylhet and Purniya (Purnia), the Parganah of Agmahal (Rajmahal) and the Teliagarhi Pass (Santal Parganas, Bihar). This area, though fragmented and varying during the pre-Mughal Muslim period, has nevertheless been a cultural unit, tied by the common thread of Bengali language.

Even when the language was at its nascent stage, during the reign of the Palas, Chandras and Senas (c. mid-8th century CE to 12th century CE), geographical and anthropological features had tied various ancient kingdoms into a unit that was often referred to as "the Eastern Country". Politically, the "Eastern Country" was composed of various provinces and kingdoms such as Pundravardhana, Varendra, Gauda, Brahma or Uttara (North) Radha, Suhma or Dakshina (South) Radha, Vanga, Samatata and Harikela (Fig. 2). At the very east lay the kingdom of Samatata which was bounded by the hills of Tripura in the east, the Meghna in the west, and encompassed within its fold the Cumilla-Noakhali region. The kingdom of Harikela lay immediately to the south of Samatata, roughly in what is now known as the Chattogram

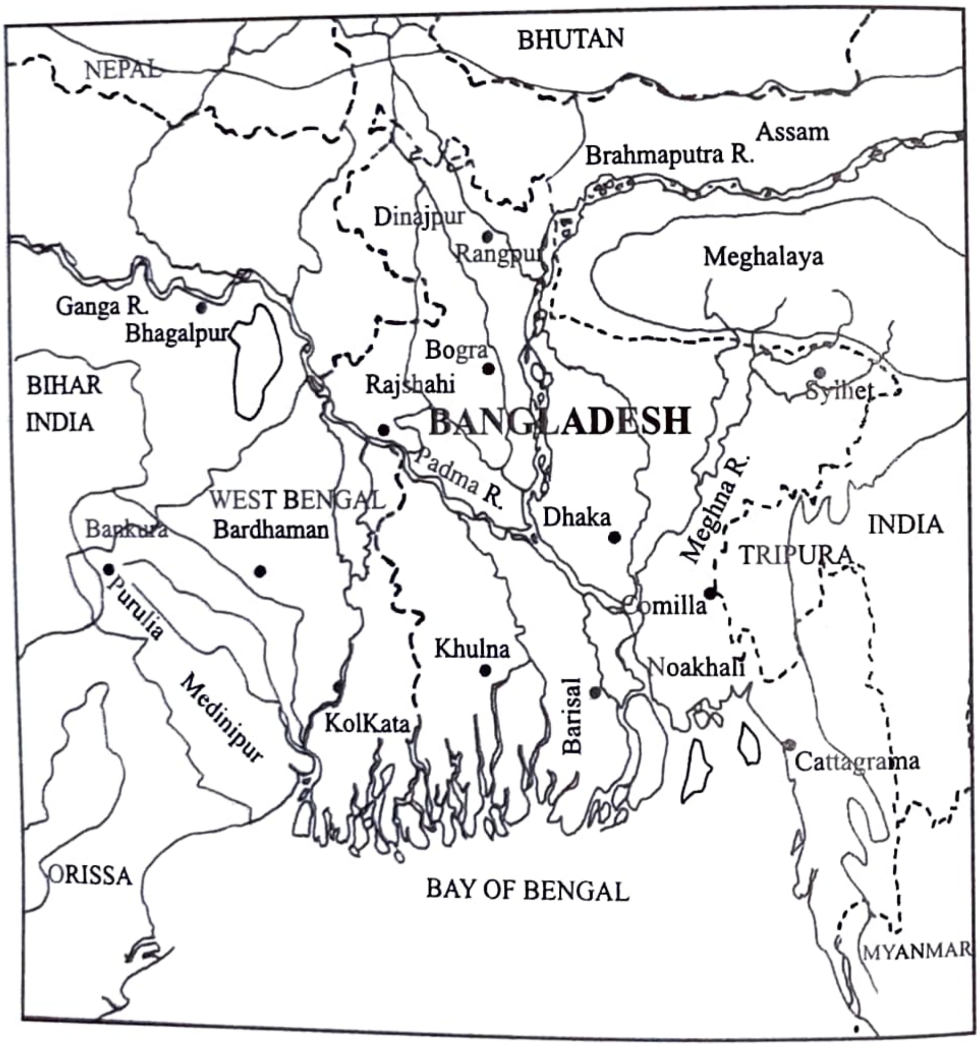

BHUTAN
NEPAL
Assam
Brahmaputra R.
Dinajpur
Rangpur
Meghalaya
Ganga R.
Bhagalpur
Bogra
Rajshahi
BIHAR
INDIA
BANGLADESH
Sylhet
Padma R.
Meghna R.
WEST BENGAL
Bankura
Bardhaman
Dhaka
INDIA
TRIPURA
Purulia
Comilla
Khulna
Noakhali
Medinipur
Barisal
KolKata
Cattagrama
ORISSA
BAY OF BENGAL
MYANMAR

Fig. 1: Map of Bengal

(Chittagong) plains and may have included part of Sylhet region in later times. Further south lay the kingdom of Arakan, which included parts of southern Chattogram in different periods. The core of Vanga territory lay within Vikrampura (present Munshiganj district) and Barishal regions but extended to the vast deltaic tract between Bhagirathi in the west, the Meghna in the east and the Bay of Bengal in the south. The core of Pundravardhana may have been the Barind or Varendra tract (substantial parts of Rangpur and Rajshahi divisions) but extended to the foothills of the Himalayas in the north, Assam in the east and the Padma River in the south. The precise location of Gauda, although mentioned by Panini, Kautilya and Vatsayan, is still uncertain. In the 7th century CE, its capital was Karnasuvarna, about 20 km south of Murshidabad and the kingdom may have included the northern part of West Bengal, India and the entire northwestern part of Bangladesh. From the end of the 8th century CE, Gaudeshvara became the official title of the ruler of Bengal (Raychaudhuri 1943: 12-14). Radha was often divided into Uttara or North Radha and Dakshina or South Radha.

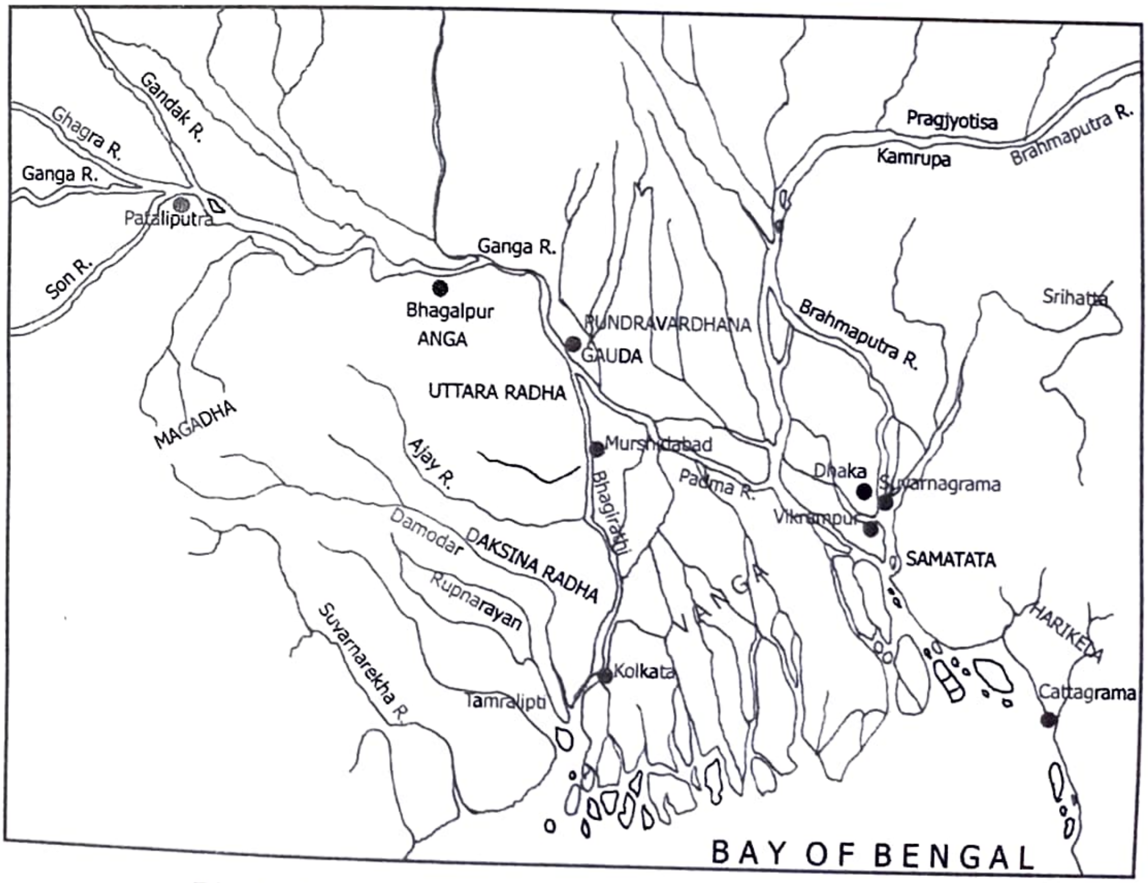

Gandak R.
Ghagra R.
Ganga R.
Pataliputra
Son R.
Ganga R.
Pragjyotisa
Kamrupa
Brahmaputra R.
Srihatta
Bhagalpur
ANGA
PUNDRAVARDHANA
GAUDA
Brahmaputra R.
UTTARA RADHA
MAGADHA
Ajay R.
Murshidabad
Bhagirathi
Padma R.
Dhaka
Suvarnagrama
Vikrampur
SAMATATA
Damodar
DAKSINA RADHA
VANGA
Rupnarayan
HARIKELA
Suvarnarekha R.
Kolkata
Tamralipti
Cattagrama
BAY OF BENGAL

Fig. 2: Map of ancient political divisions of Bengal

The former (i.e. Uttara-Radha) lay between the rivers Ajay and the Ganga, sometimes even crossing beyond it to the north, while the latter (i.e. Dakshina-Radha) lay between the rivers Ajay and Damodar and its southern boundary crossed the Rupnarayan River.

Between the Pala rule (which began in the mid-8th century CE) and the Gupta rule (which had ended by the mid-6th century CE), two distinct kingdoms had appeared in Bengal. Vanga was ruled by Gopachandra, Dharmaditya and Samacharadeva from c. 525-575 CE and Gauda ruled by Shashanka in the first half of the 7th century CE. During this era, also known as the post-Gupta era, Samatata had already emerged, Harikela was fast becoming known and the region of Bengal was fast being aryanized. But the 'process of Aryanization', as Ray (1994: 171) shows, had started earlier, not with infiltration of occasional religious preachers, traders or conquerors, but under the organized dominion of the Gupta Empire. During this era of the Gupta rule, one hears of Pundravardhana, Vanga, Samatata and a region called Tamralipti, the core of which lay in modern Purba Medinipur district.

The history of Bengal before the Gupta era is still unclear. We do not know what relation the Shungas (c. 180-68 BCE) and the Kushanas (c. 1st century BCE to CE 262) bore with the various kingdoms of Bengal. However, we do know that the Mauryas (c. 4th century BCE to 2nd century BCE) had extended their sway over Pundravardhana, Vanga, and Radha. We also learn from Patanjali while commenting on *Mahabhashya* (IV.2.52) in the 2nd century BCE that there existed 'eastern countries' comprising of Anga, Vanga, Suhma and Pundra and from Panini (*Ashtadhyayi*, VI.2.99) that Gauda and Vanga already existed by the 4th century BCE. From around the same time, during Alexander's invasion (c. 327-325 BCE), we hear of Gangaridai and Prasioi. Prasioi possibly lay to the west of the Ganga-Bhagirathi and included Tamralipti and Gaṅgaridai lay at the mouths of the river Ganga.

We have simply inadequate information from various literary sources regarding Bengal in the 6th century BCE and beyond. The *Acharangasutra*, a Jaina text from the 6th century BCE, refers to the people of

Vajjabhumi and Subbhabhumi (North and South Radha respectively) as rude barbarians. The *Aitareya Brahmana* refers to the Pundras as 'dasyus' and the *Aitareya Aranyaka* refers to the Vangas as heathen and willful, and speakers of a language like that of birds. Beyond this, we know very little about ancient Bengal.

It is this Bengal that the present volume examines. Because its boundaries have changed during various periods, it is not possible to demarcate the area of study with precision. Nevertheless, as the sketch of its history presented above shows, almost the entire Bengal lies within the geo-political entities currently known as Bangladesh and West Bengal, India. For the sake of convenience, these entities, which stretch between 20°50′ and 27°09′ N latitude and between 86°35′ and 92°30′ E longitude, will be referred to as Bengal. In definitive terms, the area of Bengal may be described thus, south of the southern foothills of the Himalayan range; the Brahmaputra River between Rangpur district of Bangladesh and the Indian state of Meghalaya; south of Garo, Khasi and Jaintia hills; west of the Barak valley, the Tripura, the Lusai, and the Arakan hills; north of the Bay of Bengal; and east of Purnia and Darbhanga districts of Bihar, the low hill range in Rajmahal and Chotanagpur and the Suvarnarekha River in Orissa.

The 6th century BCE marks the beginning of the early historic stage in South Asia and the beginning of urbanization in the Ganga valley. Because trade-related activity is a recognised characteristic feature of urbanization, we may logically believe that such activities were prevalent in the Ganga valley in the 6th century BCE. As for Bengal, urbanization may not have set in before the Maurya era, and hence, not before the late 4th century BCE. Therefore, we set the 4th century BCE as the farthest limit for this research. The downward limit of the study is set in the first half of the 16th century CE. Because it was another juncture in the history of South Asia that began in 1498 CE, when Vasco da Gama was able to obtain the service of a famous Arab navigator named Ahmad Ibn Majid for crossing from Malindi on the east coast of Africa to Gujarat (Tibbetts 1981: 60). Bengal felt the repercussions of da Gama's discovery in 1518 CE when João Coelho landed in Chattogram as a passenger in a Moorish boat, to be followed soon by Dom João de Silveira as the commander of the first Portuguese expedition to Bengal. However, they had to wait till 1537 CE to gain a foothold in Bengal when Sultan Mahmud Shah permitted them to build factories at Satgaon and Chattogram and collect custom duties at the two ports. In the very next year, the reign of Mahmud Shah ended and with him ended the Husain Shahi dynasty. The arrival of the Portuguese "does not mark the beginning of a new epoch in the commercial and political history of the area" (McPherson 1998: 138). Nevertheless, their arrival saw a change in the mood of Indian Ocean Trade that heralded (if not actually effected) the end of the monopoly of the Arab, Persian, Gujarati and Coromandel merchants. It was also the first sign that a host of other European nations would soon follow, setting in motion the process of colonization. Furthermore, with the end of the Husain Shahi dynasty there began the Afghan era, when Sher Shah Sur, his successors, and the Karrani dynasty set in motion a distinctly different cultural and political mood. Having thus demarcated the area and period of study let me now set the parameter of maritime ports and exchange centre.

Port is a "place where vessels may discharge or receive cargo; it may be the entire harbour including its approaches and anchorages, or may be the commercial part of a harbour where the quays, wharves, facilities for transfer of cargo, docks, and repair shops are situated" (Snead 1982: 220). Against Snead's emphasis on physical aspects, Kidwai (1992: 10) gives a wider perspective when she says that a port is "the place of contact where goods and people as well as cultures are transferred between land and maritime space". "It is a knot where ocean and inland transport lines meet and intervene" (Weigend 1958: 185, n. 3). Kidwai (1992: 10) goes on to point out; the concept of 'port' is economic and is distinct from the physical concept of 'harbour'. The latter, i.e., a harbour, is "the sheltered area of deep water". Because the essential feature of one is economic while the other is physical, a busy port may not be a fine harbour. Snead (1982: 210) agrees when he notes that a harbour is a shelter and a place of security and comfort; it is a "portion of a water body where ships are protected, because the area is either in part landlocked or artificially sheltered". Not denying the importance of a 'harbour' as a physical concept, this study will place greater emphasis, as far as available materials permit, to inquire on port as an economic concept "where ocean and inland transport lines meet and intervene" and as a place where goods, people and culture are transferred.

A particular type of port situated on long distance shipping routes and meets technical requirements of ocean-going vessels is known as an 'entrepôt', a "trans-shipment point where transfer of goods and/or passengers takes place from ship to ship" (Kidwai 1992: 10). Other ports may serve as 'collecting centres' and 'feeder points'. 'Collecting centres' may be identified as ports located near important ecozones, mineral-producing areas and regions with valuable forest products. In contrast, 'feeder points' may be seen as supply centres where a limited range of commodities is available. Located in the interior or near the coast, these ports feed the larger 'collecting centres' and 'entrepôts'.

The physical and cultural factors that determine the origin, evolution and growth of a port are 'site' and 'situation'. "The site is the area of land and the associated waters on which the port and port town are actually developed. It includes local topography, drainage and soil/land stability as well as the depth, temperature and movement of waters within it" (Hoyle 1967: 8, n. 13). On the other hand, 'situation' brings together physical as well as cultural aspects (Weigend 1958: 186, n. 7). "It is the geographical position of a port in a broad sense; it incorporates the socio-economic and human environment of the hinterland on the one hand and the port's relationship to world sea lanes and other seaports on the other" (Hoyle 1967: 7-8, n. 13). Security is another important aspect in the situation of a port. Economic and political factors also contribute immensely to shape the nature and life of a port. Sometimes, social forces, such as the attitude of merchants and the state machinery, play crucial roles in determining the fate of a port. This study will not only identify the sites of various ports that operated in ancient and medieval Bengal, but also will be able to locate the situation of these ports.

Based on Bird's (1963: 24-34) hypothetical concept of a standard 'Anyport', Kidwai (1992: 11) has identified six stages in the evolution of a harbour in terms of the development of facilities it offers. Of these, the first three stages fall within the scope of this study. In the earliest stage, called the 'primitive', rudimentary storage and handling facilities are created and a jetty is designed to steepen the gradient between the land and the water. Next in the evolution is the 'marginal quay extension' stage, during which the primitive nucleus is extended lineally as greater demands were created by increasing the number and size of vessels. The third stage is that of the 'marginal quay elaboration', during which "the construction of jetties extended into the water and of quays developed with the help of land excavations". Since Bird's concept of 'Anyport' draws upon the experience of the British ports, accepting his model for a study of ports in ancient Bengal may prove to be problematic. If we have fixed in our minds the historical 'mileposts' that Casson (1973: 367) draws our attention to, such as the earliest man-made installation at Delos in the 8th century BCE, the introduction by the Romans of the use of concrete capable of setting under water, etc., and look for their parallels in ancient Bengal, we may be led to treacherous grounds. As Ray (1998: 185) implies through a question she poses, "fair-weather sailing prevalent in Asia in the ancient period" may never have necessitated coastal infrastructure for maritime trade. Vessels used for sea voyages along the Indian coastline were hauled ashore for anchorage and repairs. Since they drew very little water, their entry into shallow estuaries was not hindered. Often, even down to the historical period, larger ships anchored at a distance from the coast and goods were ferried across to the shore in smaller crafts. "This practice was important", says Ray (1998: 185), "because there are few natural harbours along the vast coastline of India, hence the location of ports was determined not so much by geographical factors as by the resources of the hinterland".

The essence of Ray's observations is important for reminding ourselves that it would be futile to look for ancient port sites in Bengal

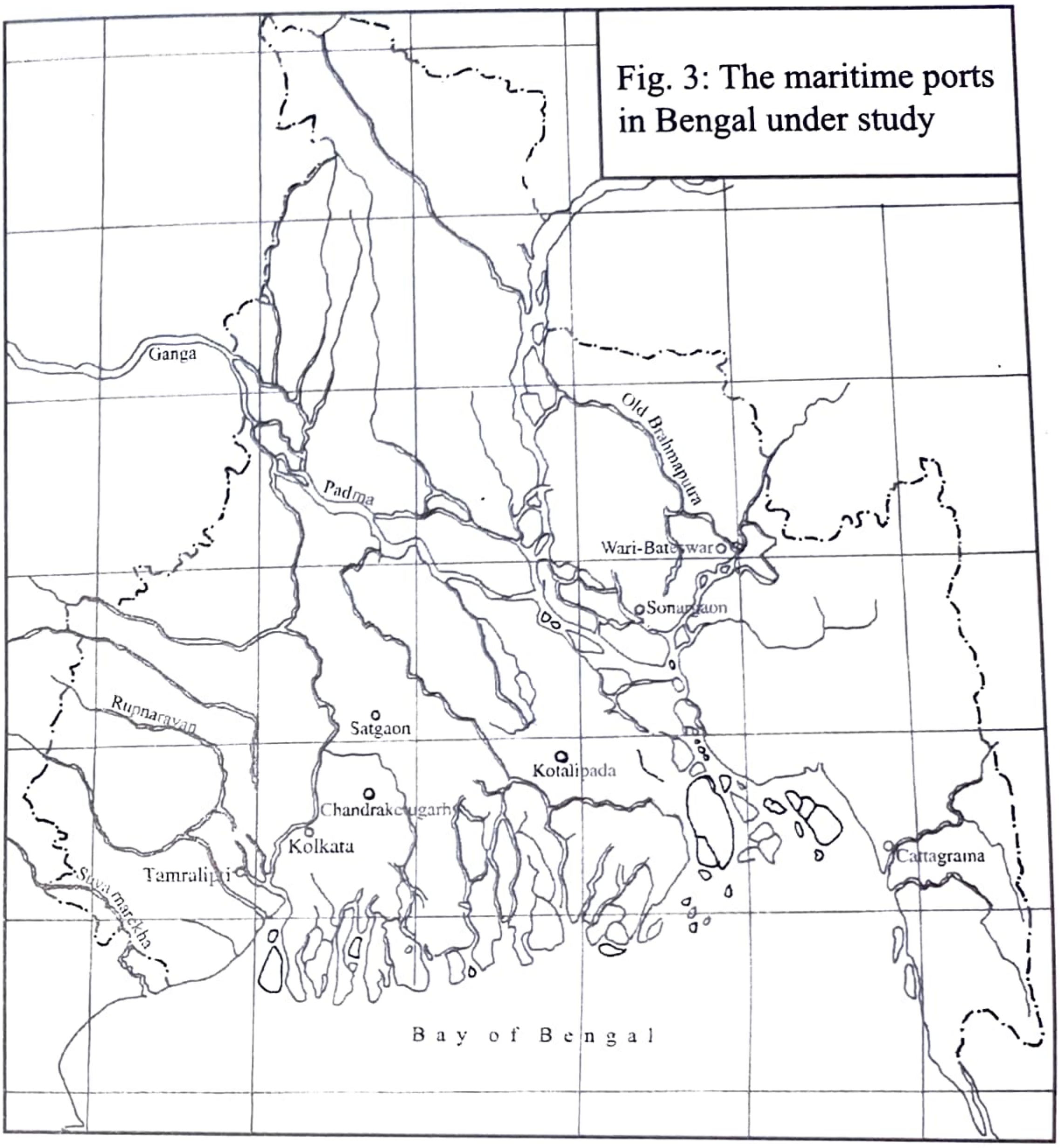


Fig. 3: The maritime ports in Bengal under study

Ganga
Padma
Old Brahmaputra
Wari-Bateswar
Sonargaon
Rupnarayan
Satgaon
Kotalipada
Chandraketugarh
Kolkata
Tamralipti
Suvarnarekha
Cattagrama
Bay of Bengal

with harbour installations as prime indicators. There was no littoral port in the region of Bengal; all were estuarine ports, because the continental shelf along the coast of Bengal slopes down very gently. Hence, the ships either had to anchor at a distance from the port (as the vessels over 9.14 m draught still have to do in Chattogram) or anchor at ports situated on estuaries of large rivers. It is no coincidence that all existing ports in Bengal, which are capable of handling ocean-going vessels, are located not on the coast but in the estuaries or near the downstream end of large rivers. The Ganga-Brahmaputra-Meghna river system is one of the largest in the world. Most of the water of Bengal Basin flows through this system and discharges finally into the Bay of Bengal. The Hooghly-Bhagirathi, the Ganga-Padma, the Brahmaputra-Jamuna and the Meghna have a moderate gradient; the velocity of the current is not excessive and has a wide bed of sufficient depth. Hence they meet all the conditions necessary for favourable navigation. Nevertheless, as Deloche (1994: 43) points out, estuarine ports pose navigational hazards due to shallow depths and shifting sandbars. However, they also offer excellent shelter and facilitate easier connection as "a knot where ocean and inland transport lines meet and intervene" through inland waterways or land routes.

Keeping in mind the above-mentioned considerations, the present volume attempts to portray the nodal points that were engaged in maritime trade in Bengal with clear enumeration of all major aspects between the 6th century BCE and the 16th century CE. The sources employed for this research were assembled from field level archaeological investigations, museums, private collections, physiographic and geomorphological maps, satellite images, ethnographic field works on traditional knowledge of contemporary seafaring communities, a thorough survey of available published literatures, and unpublished reports, etc. concerning to maritime ports situated in Bangladesh and West Bengal, India prior to the first half of the 16th century CE. However, these sources need to be reckoned in view of quite a few constraints. Firstly, much of the archaeological evidence that we have at hand from Bangladesh and West Bengal are prior to the 6th century CE. Secondly, of all the archaeological investigations that have been conducted so far, there is either very little published literature or it is almost impossible to access unpublished reports. Little that is available or accessible is imprecise and disorganized. The problem is aggravated by the fact that a very few excavations have taken place in coastal West Bengal, India and Bangladesh. Furthermore, no underwater archaeological discovery has yet been made within the area of study. Nevertheless, an attempt has been made to prioritize archaeological evidence (such as pottery, beads, seals and other relevant materials discovered either sporadically or in archaeological context), especially for the early historic period.

Absence of extensive archaeological data from the 6th century CE onwards, fortunately enough, is made up with a profusion of epigraphic sources and as such, the late historic and the early medieval history of Bengal is constructed primarily on these sources (although it is most regrettable that many of the copperplate land grants have not yet been deciphered). It is true that epigraphic sources rarely speak directly about maritime trade or port. But as Niharranjan Ray (1994: 100) correctly reminds us, "[w]hat is unmentioned is not necessarily non-existent". We also need to remember, as he further urges us, that "[i]nscriptions and literary accounts were not written to provide information about the basic products of a certain region or of its trade and commerce or of its social and economic condition" (*ibid.*: 101). Hence, careful evaluation of evidence that epigraphic sources offer can often prove to be invaluable if we are prepared to make tangential inferences.

Two other important sources of evidence employed in this research are iconographic and numismatic in character. Archaeological records, valuable as they are, become prominent in reconstructing prehistoric, protohistoric and early historic periods. However, in the historical period these become supplementary in character because of availability of written records. This consideration has made literary sources extremely helpful for this research. South Asian creative literature, Greco-Roman, Chinese and Arab-Persian accounts, European travelogues, and historical records have proved to be a plenteous field that has sustained our probing into some of the complex concepts and intriguing questions. The study of maritime port is a multi-disciplinary subject. Hence, for identifying sites of maritime ports, geographical maps, satellite images, and geological evidence have proved to be invaluable.

Observations and deliberations of the study obtained from the sources mentioned above have been presented in the eight chapters of *Maritime Ports in Bengal*. The first chapter has navigated approximately five hundred years to express the initial stages. The seven maritime ports (Fig. 3), Tamralipti, Gangê, Wari-Bateshwar, Kotalipara, Sonargaon, Satgaon, and Chattogram respectively, are demonstrated in the next seven (two to eight) chapters. These were maritime gateways for Bengal as well as the outlets of the landlocked regions (Bhutan, Tibet, Nepal, Meghalaya, Assam, and Tripura) from the ancient to the medieval period. The eight essays of the book are actually a revised version of the articles and working papers published by me at various places in Bangladesh, India and England over the last twenty-two years. I have no pretension of claiming my deliberations to be a definitive reading and a 'closed' text. Like all research findings, I am aware of loose ends in my presentation and hope this will serve more as the initiation of a dialogue that will eventually get us closer to solving the riddle of the seven maritime ports discussed in this volume.

Before engaging a reader in a journey about two thousand years as delineated in the eight chapters of *Maritime Ports in Bengal*, it is necessary that I state my subject position. I am a woman, an archaeologist by profession, a Muslim by birth and a citizen of Bangladesh. The choice of the area of study of this volume was generated out of a touch of postcolonial positioning. Laying aside romantic claims of a glorious past that usually motivates a nationalist stance, I wanted to 'discover' my past in a globalized world. I have attempted to arrive at a construction that allows one to glimpse of Bengal (much of which is today Bangladesh) from the 6th century BCE to the 16th century CE in terms of its maritime ports, which in turn allows one to examine the routes that the people of this country chose to travel or were forced to travel because of trade. Hopefully, this will be a source of inspiration for the people of the country today, marginalized as they are in the globalized context of world trade and earn respect from the people of other nations.

Chapter One

Unnamed and Unnamable Ports in Early Bengal

The Sri Lankan Pali chronicles, *Mahavamsa*, *Rajavalliya* and *Dipavamsa*, believed to be the earliest literary reference to maritime activities in Bengal. The chronicles, compiled from earlier sources and composed between the 4th century CE and the early part of the 5th century CE, do not make any allusion to ports in the story of Prince Vijaya landing in Sri Lanka in the 5th century BCE. Chapter Six of the *Mahavamsa* speaks of a country of the Vangas and a nearby country of the Kalingas, which were allied through matrimonial relationship. Simhavahu, grandson of the king of the Vangas founded a city called Sihapura in the forested land of Lala (Ladha=Radha). There, he had sons born unto him, the eldest of whom, Vijaya infuriated his subjects by his evil conduct. When the subjects demanded Vijaya's death, Simhavahu must have been torn between the duty of a king and love of a father, for, as the chronicles show, he put Vijaya not to death but condemned him to a journey, which meant death in any way.

> 43. Then did the king cause Vijaya and his followers, seven hundred men, to be shaven over half the head [shaving of head signified loss of freedom] and put them on a ship and sent them forth upon the sea, and their wives and children also. 44. The men, women, and children sent forth separately landed separately, each (company) upon an island, and they dwelt even there. 45. The island where the children landed was called Naggadipa [Island of children] and the island

> where the women landed Mahiladipaka [Island of women]. 46. But Vijaya landed at the haven called Supparaka but being there in danger by reason of the violence of his followers he embarked again. 47. The prince named Vijaya, the valiant, landed in Lanka, in the region called Tambapanni on the day that the Tathagata lay down between the two twin-like sala-trees to pass into nibbana (Geiger 1986: 51-54).

A closer examination of the passage cited above reveals "the haven called Supparaka". A "haven" is a "sanctuary", even a port. In any case, the implication is clearly of a "safe anchorage". We need not argue about the historical existence of the port of Supparaka or Sopara in the 5th century BCE. What is important, concerned as we are, with maritime ports in Bengal, is that Supparaka is mentioned as a haven, but the point of departure of Vijaya and his men, women and children as well as the point of landing in Sri Lanka is not even mentioned. Hence, we may conclude that no such "haven" or "safe anchorage" existed in Radha during that time. That Vijaya and company were put on a ship and sent forth on the sea implies that seafaring activities were not unknown to the people of Radha. Perhaps, in these very early times, the vessels were simply hauled ashore for anchorage (Jahan 2004a: 56 and 2006: 8). We are now speaking of unidentified and unidentifiable points on the Contai Coast. As we shall see presently, another excerpt from the same text (Chapter XIX, verses 1-23), which describes transportation of the Bodhi-tree to Sri Lanka, Tamralipti developed into a port not very far from these early launching points of seafaring activities.

There are two more descriptions of maritime voyages from Bengal in the *Mahavamsa*. One is about the journey of Vijaya's messenger carrying his letter to Sihapura in Lala and Panduvasudeva's journey to Sri Lanka (Chapter VIII, verses 1-12). With thirty-two sons of ministers, Panduvasudeva is said to have "embarked" in the guise of monks and "landed at the mouth of Mahakandara River". It is clear that the island had already developed an estuarine-landing spot at the mouth of the Mahakandara River, which is now identified as the Mahaveliganga (Perera 1951: 114). These, too, may not have been regular harbours, but the search for "safe anchorage" was obviously on. Noteworthy is the fact that Lala (or Radha) was yet to develop similar estuarine landing spots. The second reference in the *Mahavamsa* (Chapter VIII, Verses 18-24) recounts the flight of the beautiful daughter of Sakka Pandu (a king who ruled from a city on the further side of the Ganga, Morapura according to Mookerji 1957: 49). Two points in the description are worth drawing attention to: (1) Sakka Pandu "placed his daughter speedily upon a ship, together with thirty-two women-friends, and launched the ship upon the Ganges" and (2) they landed at "the haven called Gonagamaka". By this time, the launching point of ships had definitely moved from the coast to a safer point on the Ganga, presumably a point on the estuary. It was not yet a regular harbour, for the king is described to have "launched the ship", as though from makeshift arrangements made on a dry bank where it had been earlier hauled for safety. Sri Lanka, on the other hand, had already developed a haven, i.e., a safe anchorage, at Gonagamaka, identified as Trincomalee (Perera 1951: 114).

Milindapanha (c. 1st century CE), the next important literary evidence from South Asia, indicates a dramatic growth in maritime contact with Bengal.

> Just, O King, as a ship-owner who has become wealthy by constantly levying freight in some sea-port town, will be able to traverse the high seas, and go to Vanga, or Takkola, or China, or Sovira, or Surat, or Alexandria, or the Koromandel coast, or Farther India, or any other place where ships do congregate – just so, O King, it is he who in former births has undertaken and practised, followed and carried out, observed, framed his conduct according to, and fulfilled these thirteen vows, who acquires all the results of the life of a recluse, and all its ecstasy of peace and bliss becomes his very own (VI, 21, 360; Davids 1894: 269).

Even a cursory glance at the cited excerpt will reveal that the image of ships sailing from seaports had become widely known. Although no port is mentioned by name in Vanga and China and the Coromandel Coast, the narrator implies its existence by referring generally to 'sea-port' at the beginning of the sentence.

We have traversed about five centuries to comprehend the early tentative beginnings on the coast, then moving to estuarine points and finally to ports with, what must have been, busy harbours. This journey is of anonymous port/s in Radha and Vanga – unnamed and unnamable.

Chapter Two

Tamralipti: A Well-known South Asian Maritime Port

Considered to be one of the oldest maritime ports in the entire South and Southeast Asia, Tamralipti, has a number of synonyms in South Asian literature (especially Pali and Sanskrit). These are Tamralipta, Tamlipti, Tamlipta, Tamraliptak, Tamalini, Vishnugriha, Stambhapura, Tamalika, Velakula, Tamalitti, Gambhira etc. It has also been cited as Damalipta in Dandin's *Dashakumaracharita* (circa 6th century CE) and in the *Abhidhanachintamani* of Hemachandra (11th century CE), Tamalites by Ptolemy (2nd century CE), To-mo-liti by Faxian (5th century CE) and Tan-mo-lih-ti by Xuanzang (7th century CE). The port of Tamralipti attracted the attention of various scholars since the mid-19th century. However, regarding its geographical location, scholars are yet to reach firm agreement. Taylor (1847) and Fergusson (1971) have identified Tamralipti with the modern Sonargaon, ancient Suvarnagrama. Disagreeing with them, Schoff (1995: 255) has identified it with Tamluk. This view is supported by Sastri (1927: 167, 169-170), who, while discussing Ptolemy's Tamalites, has unhesitatingly identified Tamralipti with the modern Tamluk, "a town lying in a low and damp situation on a broad reach or bay of the Rupnarayan River", 19.31 km above its junction with the Hooghly mouth of the Ganga. Most scholars of contemporary times, including Ray (1994: 244), have agreed with the above identification. However, in an earlier paper, Ray (1979) has suggested that for a proper identification of ancient Tamralipti "we have to look further south of modern Tamluk". Datta (2000: 136) agrees with Ray (1979) and believes that Tamralipti lay further south of Tamluk. Because almost all literary sources locate Tamralipti on the Ganga and not Rupnarayan, Datta argues that the original site of the ancient port must be looked for on the bank of the Ganga. Accordingly, he has located it at Natsal, situated 10 km south of Tamluk, on the right bank of the Hooghly River. Citing archaeological materials found at Natsal, Datta concludes that Natsal was ancient Tamralipti. Unfortunately, no scientific research has yet been carried out that takes into account all available data and is focussed particularly at arriving at an acceptable solution to the problem. This essay attempts to amend this gap. It begins with an examination of literary, geographical, geological and archaeological evidence to identify the precise location of the port of Tamralipti and then proceeds to ascertain the physical condition of the port and the period of its operation.

Literary References to Tamralipti

Chandra (1977: 130), attempting to prove the existence of Tamralipti in the age of the Mahabharata (which assumed its present form of compilation between the 4th century BCE and the 4th century CE according to Winternitz 1978: 417), has tried to show that the "Sabhaparva" of the *Mahabharata* (ii, 27, 22-49) indicates knowledge of a sea-route between Tamralipti and Bharukaccha (Barygaza, Bharuch) and also to Sumatra, Java and other places. Takakusu (1896: XXXIII-XXXIV) appears to be referring to Chandra and agreeing with him when he notes that the port "figures even in the sacred writings of the Hindus". As we shall see presently, these scholars are not far from the truth.

The Sri Lankan Pali Chronicles speak of Tamralipti for the first time in the *Mahavamsa* (II) while recounting Simhalese King Devanampiya Tissa's exchanging of gifts with Emperor Ashoka. As recounted in *Mahavamsa* (XIX, 1-8), Emperor Ashoka transported the Bodhi tree on a ship that sailed down the river Ganga from his capital

Pataliputra to Tamalitti "in just one week". He travelled over land to Tamalitti, well in time to receive the holy tree and worshipped it after having it "placed on the shore of the great ocean". Then he had the tree set on a ship (*Mahavamsa*, XIX, 11). After due respects were paid, "the ship, laden with the great Bodhi tree, fared forth into the sea" (*Mahavamsa*, XIX, 17). Finally, the ship arrived at Jabbukola (in Sri Lanka) (*Mahavamsa*, XIX, 22-23). Although the harbour of Tamalitti (Tamralipti) is not clearly identified, the Mahavamsa appears to imply its location at a point on or close to the Bay of Bengal Coast ("the shore of the great ocean") and on or near the bank of the Ganga (down which the Bodhi tree was transported from Pataliputra). Although Ashoka's journey by land-route, transportation of the Bodhi tree by riverine route and onward transportation of the tree on a maritime vessel all indicate that Tamralipti had already developed into a knot where ocean and inland transport lines met. Lest we overlook, it is an important indication of the political status of Tamralipti that the port was under the Mauryan domain.

Three *Jataka* tales (although ascertaining definite period for these tales is difficult, for the purpose of this research Ghosh's <1323 BS: xi> conservative dating will be adopted, who placed the earlier forms of the tales to the 4th century BCE or earlier), Mahajanaka Jataka (Book XXII, No. 539; Cowell 1957, VI: 19-37), Shankha Jataka (Book X, No. 442; Cowell 1957, IV: 9-13) and Samudda-vanija Jataka (Book XII, No. 466; Cowell 1957, IV: 98-104), make clear references to maritime activities in Bengal. However, they certainly do not "mention trade between Tamralipti and Ceylon" as Ray (1994: 296) claims. In fact, there is no mention of Tamralipti and Ceylon (Sri Lanka) in these tales. However, the three *Jataka* stories agree with one aspect of Ashoka's transportation of the Bodhi tree: all speak of ships sailing down the river Ganga. Instead of changing ships, as in the case of transportation of the Bodhi tree, the *Jataka* ships sail directly from the Ganga to the sea. Thus, it appears that till at least the 4th century BCE, the Ganga played the role of an artery for inland connection. It may even have been navigable for maritime vessels up to a considerable extent (Jahan 2005a: 117). We need not interpret Benares (from where the carpenters and their families of Samudda-vanija Jataka sail down in a ship) literally because the city features in the *Jataka-mala* more in a figurative and in a conventionalized manner than a historically authenticated urban centre. More important is the indication in all the Jataka stories that Tamralipti served a vast hinterland of lower and middle Ganga valley. For this entire region, the river Ganga and the port of Tamralipti provided the sole outlet to the high sea (Jahan 2004b: 202). Furthermore, Mahajanaka Jataka and Shankha Jataka bear indications that an unnamed harbour on the downstream end of the Ganga or near its estuary had become a knot of economic nature since we hear of goods and people being transferred from inland lines of communication to the oceanic lines.

The next important reference to Tamralipti, as recounted in the Sri Lankan Chronicles, is in the *Datha-dhatu-wanso*. In it is recounted the legend of Dantakumara who conveyed the tooth-relic in 371 CE in a ship which plied regularly between Tamralipti in Bengal and the ports of Sri Lanka (Mookerji 1957: 50). Thus, by 371 CE, when the tooth-relic was brought to Sri Lanka (Rahula 1956: 280), Tamralipti is definitely indicated as an entrepôt or a "transshipment point where transfer of goods and/or passengers takes place from ship to ship". The regularity of ships plying between Tamralipti and Sri Lanka further implies maritime trade.

Later literary references give us further information regarding the site and situation of Tamralipti. For example, Damalipta, as described in the story of Mitragupta in the Dandin's *Dashakumaracharita* (uchchhvasa VI: 149-173) (circa 6th century CE), is a prosperous port-city of the Suhmas close to the sea and near the Ganga. It is frequented by sea-going boats of different races, among whom feature prominently the Yavanas (Kale 1966: 320-339). Not only is the estuarine nature of the port confirmed, its economic aspect is also indicated in its prosperity. One may also deduce clear suggestions of a busy port where the Yavanas and people of other nations (and also the goods that they brought) were transferred. Not the least in importance from the king of Tan Mei (Tamralipti) to the "Yellow Gate" (the Chinese Court) in the 3rd century CE. Petech (1950: 53) believes that the embassy was sent to the court of the southern Wu dynasty (222-280 CE) in Nanking since K'ang-T'ai was a subject of the same dynasty. On the other hand, *Fu-Nan-Chuan* shows that the Chinese were well acquainted with the exact location of Tamralipti. It has been described as a kingdom and there is an implicit claim of a political relationship between the Yellow Gate and Tamralipti, verging on the political domination of the former. According to *Fu-Nan-Chuan*,..

> coming out of the port of Chü-li [or T'ou-chüli, possibly on the western coast of Malay Peninsula, now in Thailand] one enters the great Bay. Travelling straight to the north-west for more than a year one reaches the mouth of the great river … there is a kingdom called Tan-mei which belongs to Tien-chu. (Its rulers) sent letters to the Yellow Gate (the Chinese court), and was appointed by China king of Tan-mei (Petech 1950: 53).

From the early 5th century CE we begin to get more information about Tamralipti, possibly the most detailed and authentic accounts from three famous Chinese pilgrims. The earliest of the three was Faxian who visited India in 399-414 CE. He arrived at Tamralipti by the land route from Champa, resided in the city for two years and then sailed for Sri Lanka. In the excerpt quoted below, one does not fail to notice that Tamralipti in the early 5th century CE is described as a kingdom with a considerable Buddhist population. The Buddhist institutions (*sangharamas*) of the kingdom were definitely centres of great Buddhist learning to warrant Faxian's residence there for two years.

> From there [Champa], continuing to go eastwards nearly fifty yojanas, we arrive at the kingdom of Tamralipti. Here the river empties itself into the sea. There are twenty-four *sangharamas* in this country, all of them have resident priests, and the law of Buddha is generally respected. Faxian remained here for two years, writing out copies of the sacred books (*sutras*) and taking impressions of the figures (used in worship). He then shipped himself on board a great merchant vessel. … Men of that country (Tamralipti) say that the distance between the two is about 700 yojanas (*Fo-kwo-ki*, XXXVII; Beal 1869: 147-48).

Both Legge's (1886: 100) and Giles' translation (1972: 65-67) describe Tamralipti not as a 'kingdom' but a 'country' having 22 monasteries and a sea-port. Although it is referred thus, we need not interpret Tamralipti as an independent kingdom if we consider that Chandravarman of Puskarana in south-west Bengal was the Chandravarman of the Allahabad *prashasti* whom Samudragupta (c. 335-375 CE) had ousted before Faxian's visit. We should note that our priest appears to have been too preoccupied with Buddhism; for he does not even allude to the commercial milieu of Tamralipti as does the *Katha Sarit Sagar*. Let us also take into cognizance that Faxian's account confirms Tamralipti as a port and attests the possibility that a substantial number of people of Tamralipti were adherents of Buddhism.

Over two and a quarter centuries after Faxian, another celebrated Chinese pilgrim Xuanzang, who travelled in South Asia from 629 to 645 CE, arrived in Tamralipti by foot from Samatata. He too described it as a 'country', with a capital by the same name (i.e., Tamralipti) bordering the sea (Bay of Bengal). Xuanzang's description implies that Tamralipti was well connected by land as well as water, its economy was strong because of agricultural cultivation and natural products ("wonderful articles of value and gems"), and hence, the population was generally wealthy. However, Buddhism appears to have been on the wane because the number of monasteries decreased to ten from Faxian's twenty-four. If Deva temples signify Brahmanism, then there can be no doubt about its rise.

> From Samatata going west 900 *li* or so, we reach the country of Tan-mo-lih-ti (Tamralipti). This country is 1,400 or 1,500 *li* in circuit, the capital about 10 *li*. It borders on the sea. The ground is low and rich; it is regularly cultivated, and produces flowers and fruits in abundance. The temperature is hot. The manners of the people are quick and hasty. The men are hardy and brave. There are both heretics and believers. There are about ten *sangharamas*, with about 1000 priests. The Deva temples are fifty in number, in which various sectaries dwell mixed together. The coast of this country is formed by (or in) a recess of the sea; the water and the land embracing each other. Wonderful articles of value and gems are collected in abundance, and therefore the people of the country

> are in general very rich. By the side of the city is a *stupa* which was built by Ashoka-raja; by the side of it are traces where the four past Buddhas sat and walked (*Si-Yu-Ki*, Book X; Beal 1906: 200-201).

The third celebrated Chinese monk Yijing, who departed from China in 671 CE and returned home in 695 CE, arrived in Tamralipti in 673 CE and described it as "a port on the coast of Eastern India" (Takakusu 1896: 211).

> Tamralipti is forty yoganas south from the eastern limit of India. There are five or six monasteries; the people are rich. It belongs to E. India and is about sixty yoganas from Mahabodhi and Sri-Nalanda. This is the place where we embark when returning to China (Takakusu: xxxiii-xxxiv).

Yijing's Tamralipti was also well connected by land as well as sea. After arriving at the port, the monk "with the teacher Teng, … took the road straight to the west, and hundred merchants accompanied them to mid-India" (Lahiri 1986: 76-79). However, the land route was not very safe as he "met a band of robbers" on his return journey to the port. The port itself had become very important because not only Yijing but numerous other monks (at least four) described in the *Kao-Seng-Chuan* (Biographies of Eminent Monks), directly arrived here from China via Bhoga (Palembang) and Ka-cha. The condition of Buddhism must have further deteriorated at the end of the third quarter of the 7th century CE, because the number of monasteries had dwindled to five or six from Xuanzang's ten. Nor did he remain in the port-city for Buddhist texts, as did Faxian, but travelled to central India. Summing up the travel accounts of the three Chinese monks, we may note that Faxian's departure from Tamralipti and Yijing's arrival and departure clearly show that Tamralipti served as a place of contact where people met and culture was exchanged between land and maritime space. All the literary evidence discussed above amply prove the existence of the port of Tamralipti in Bengal.

Physiography of Tamluk

According to Ray (1994: 57), the ancient course of the Ganga-Bhagirathi lay westward from Triveni till it joined the Damodar from where it was renamed Saraswati. Into the Saraswati also flowed the Rupnarayan, Ajay and other rivers from the hills of Chotanagpur and Manbhum. He goes on to say, "the Sarasvati later abandoned this course and flowed directly south, for some time running along the course of the Rupnarayan-Patraghata. After the eighth century the mouth of this older watercourse became that of the Sarasvati-Bhagirathi". Sometime between the 8th and the 14th century CE, the Saraswati shifted eastward, to its contemporary course, through which the Ganga-Bhagirathi also flowed for some time. From the 10th century onwards, the Ganga-Bhagirathi began to flow along its contemporary course till Kolkata-Betar, from where it continued south along the course of the Adiganga. Sometime in the 18th century CE, the river abandoned its Adiganga course and took up its present course along Bajbaj and Falta.

On the other hand, Rennell (1788) has identified a moribund channel of the Saraswati, which flowed past Chanditala, Amta and joined the Rupnarayan at Kolaghat. It was an ancient outlet of the Bhagirathi-Hooghly. Rudra (1990: 248-250) picks up Rennell's argument to show that the Chanditala-Amta-Kolaghat channel was the oldest course of the Bhagirathi-Hooghly (Fig. 2.1), which remained juvenile until 700 CE. Around that time, i.e., 700 CE, the river migrated eastward, to flow through the present Saraswati channel till Sankrail, through the present Hooghly channel from Sankrail to Geonkhali and there to unite with the Rupnarayan. The memory of the ancient Bhagirathi-Hooghly uniting with the Rupnarayan at Kolaghat is still alive among the local inhabitants, who call the river Rupnarayan as the river Ganga from south of Kolaghat. Early European cartographers, such as Joao de Barros (1550) (Fig. 2.2), Gastaldi (1561) (Fig. 2.3) and Blaev (1650) (Fig. 2.4) followed this popular tradition in identifying the Rupnarayan estuary as the river Ganga in their maps. Comparing these two opinions, one finds a general agreement of Saraswati flowing through Damodar or Rupnarayan and the eastward migration of its course. However, there are major differences; Ray (1994: 57) seems to be unclear about the role of the Rupnarayan.

In order to arrive at a firm conclusion, two satellite images, whi cover the 24-Parganas and Medinipur districts of West Bengal, Ind were examined for understanding the geomorphology of the regio

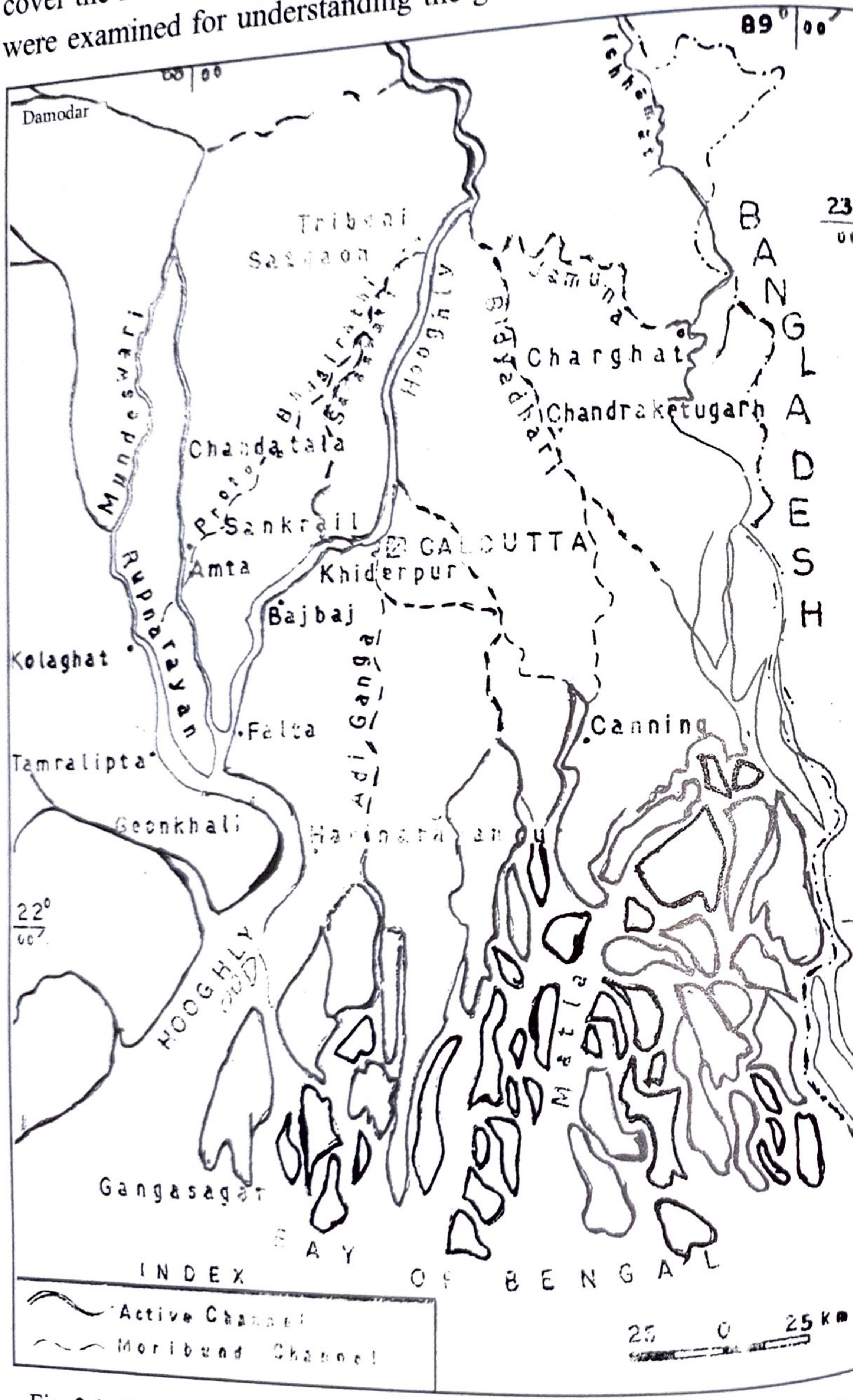

Damodar
88°00
89°00
Ichhamati
Tribeni
Saptagaon
Bhagirathi
Saraswati
Hooghly
Jamuna
Bidyadhari
Charghat
Chandraketugarh
BANGLADESH
23°00
Mundeswari
Proto
Chandatala
Sankrail
CALCUTTA
Amta
Khiderpur
Bajbaj
Rupnarayan
Kolaghat
Adi Ganga
Falta
Canning
Tamralipta
Geonkhali
Harinarayanpur
22°00
HOOGHLY
Matla
Gangasagar
BAY OF BENGAL
INDEX
Active Channel
Moribund Channel
25 0 25 km

Fig. 2.1: The ancient course of the Bhagirathi-Hooghly after Rudra 1990

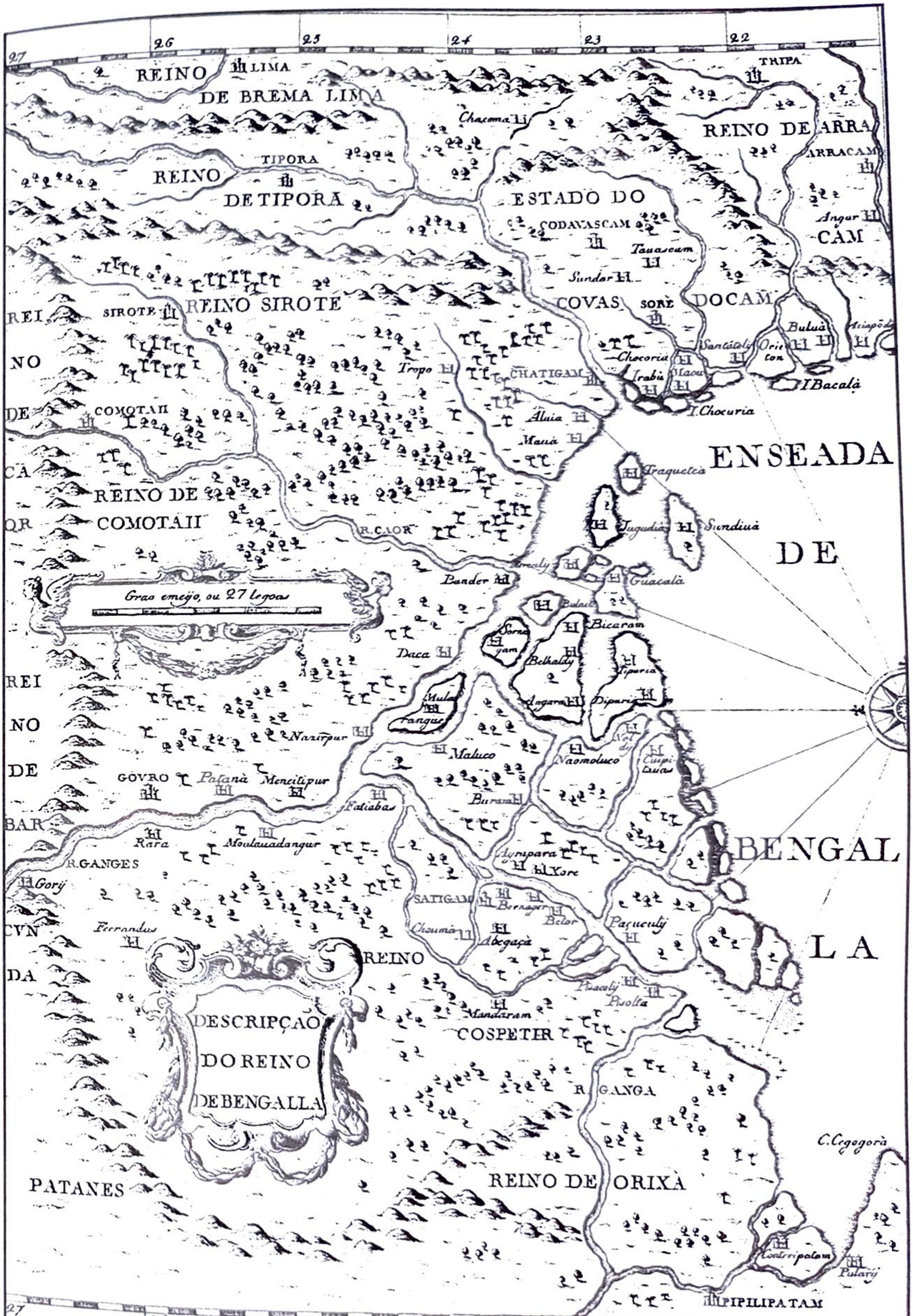

27
26
25
24
23
22
REINO DE BREMA LIMA
LIMA
TRIPA
Chacoma
REINO DE ARRACAM
ARRACAM
TIPORA
REINO DE TIPORA
ESTADO DO CODAVASCAM
CODAVASCAM
Tauascam
Sundar
Angur
CAM
COVAS
SORÈ
DOCAM
SIROTE
REINO SIROTE
REI NO DE CA OR
Tropo
CHATIGAM
Chocoria
Irabù
Maou
Santaloli
Orit con
Buluà
Aciapodi
I. Chocuria
I. Bacalà
COMOTAII
Àluia
Mauà
ENSEADA DE BENGALA
Graqueteà
Jugudià
Sundiuà
REINO DE COMOTAII
R. CAOR
Bander
Guacalà
Grao emeijo, ou 27 legoas
Bulua
Bicaram
Sornagam
Belhaldy
Tipuria
Daca
Angara
Diparia
Mulafangue
REI NO DE BAR CVN DA
Nazirpur
Maluco
Naomoluco
Cupitauas
GOVRO
Patanà
Meneilipur
Fatiabas
Buraza
Rara
Moulauadangur
R. GANGES
Gorij
Aynpara
Yore
SATIGAM
Bernager
Belor
Paçuculij
Choumà
Abegaçà
Ferrandus
REINO
Pisacolij
Pisolta
Mandaram
DESCRIPÇAO DO REINO DE BENGALLA
COSPETIR
R. GANGA
C. Cegogorà
PATANES
REINO DE ORIXA
Contripalam
Pularij
PIPILIPATAM
27
26
25
24
23
22

Fig. 2.2: Joao de Barros' map of Bengal (1550 CE).
Source: mappingbengal.com

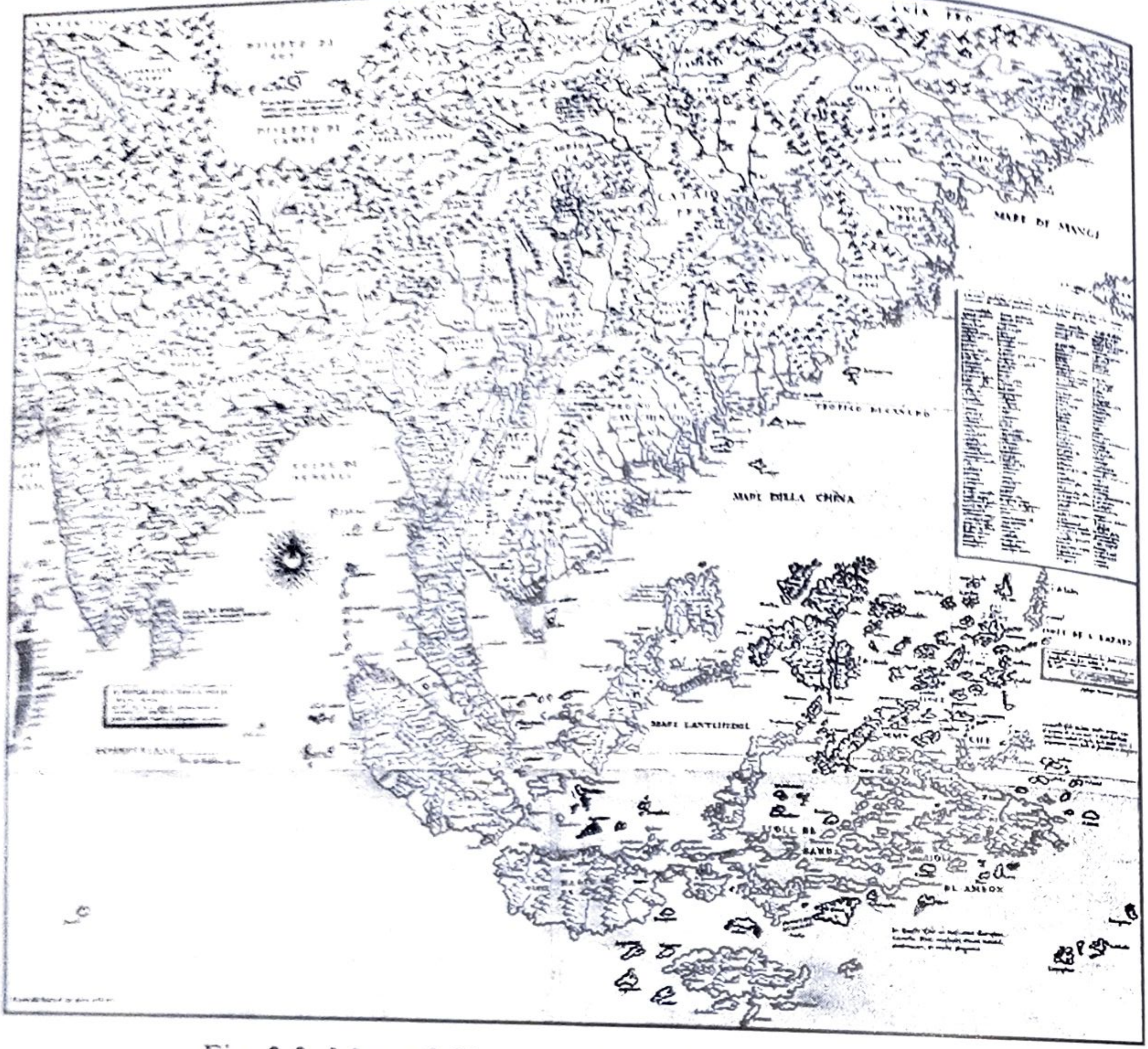


Fig. 2.3: Map of Giacomo Gastaldi (1561 CE).
Source: commons.wikimedia.org

These were Landsat-5, dated February 20, 1986, TM 234, path & raw 138-045 and scale 1: 250000 and Landsat-5, dated January 9, 1988, TM 234, path & raw 138-045 and scale 1: 250000. The result derived from the examination of the images is clearly in agreement with Rudra's (1990: 248-250) view. The image of the palaeochannel clearly shows the changes of the course of the mighty river Ganga from west to east. The images also show beach ridges running parallel to the sea. Visible in four different layers, these ridges show the progradation of the coastal plain. Thus, there can remain no doubt that the site of Tamluk (22°18′0″ N & 87°55′12″ E) in East Medinipur district, West Bengal, during the early historic period, was closer to the sea coast. Because of the recession of the coastline, the present location of Tamluk is 50 km away from the sea. Therefore, Tamluk, which lies on the ancient united course of the Bhagirathi-Hooghly and Rupnarayan, and which was much closer to the sea in ancient times, can rightfully claim to be on the bank of the ancient river Ganga in accordance with literary tradition of Tamralipti's location.

The conclusion drawn above does not negate Datta's (2000) claim over Natsal. We propose that Tamluk on the west (right) bank of the River Rupnarayan, Natsal on the west (right) bank of the Hooghly, along with Harinarayanpur and Deulpota on the east bank of the Hooghly were all harbours of the ancient port of Tamralipti (Fig. 2.5). If one recalls the navigation practice in Bengal (both riverine and marine), one will immediately remember that any large market-town has a number of *ghats* (quays). Sometimes these are built on important commercial or industrial points of the market-town, at other times according to available depth of water and necessary draught of vessels

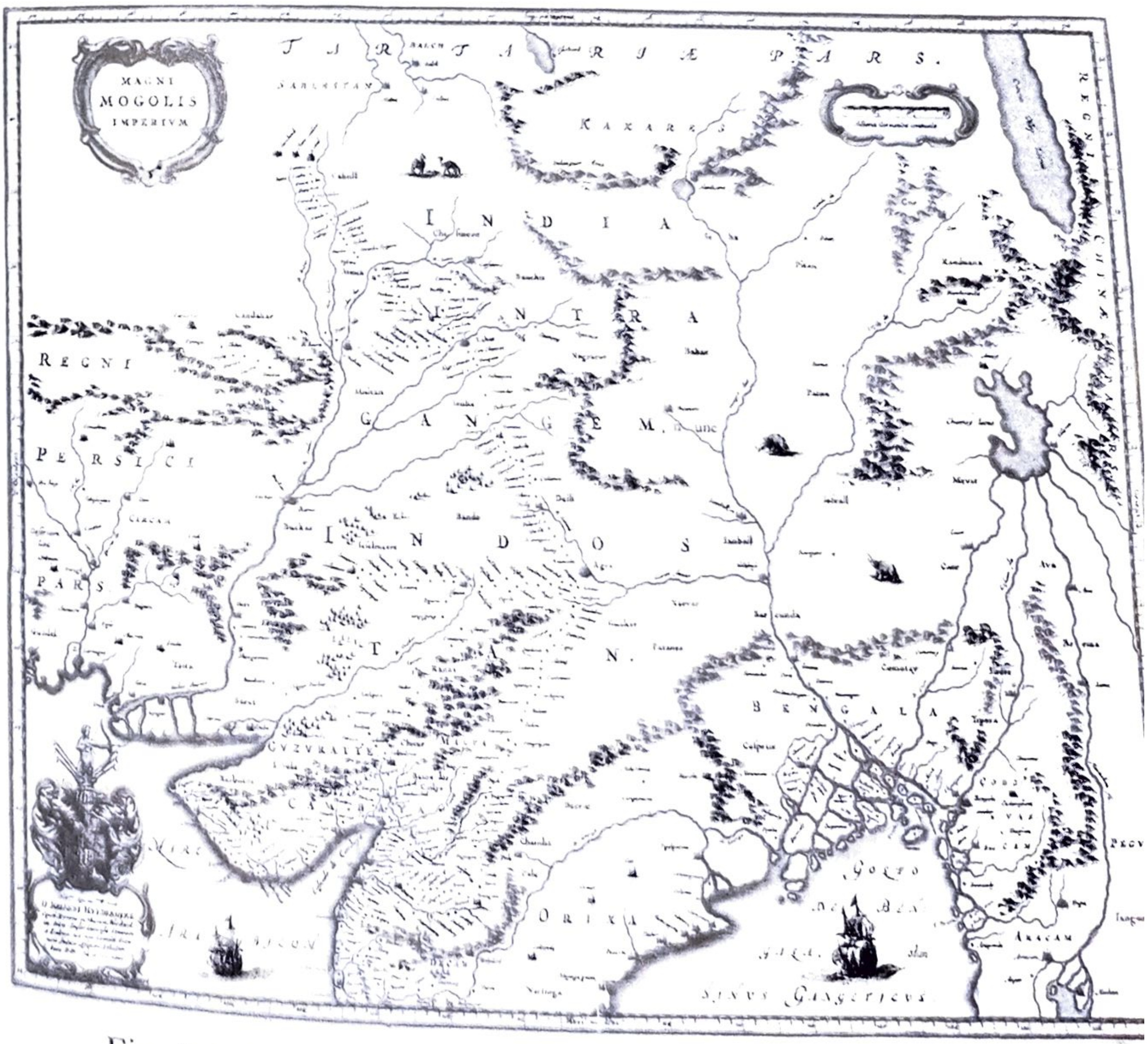

MAGNI MOGOLIS IMPERIVM
TARTARIAE PARS.
KAKARES
INDIA INTRA GANGEM
REGNI PERSICI PARS
INDOSTAN
CVZVRATTE
BENGALA
ORIXA
GOLFO DE BENGALA
SINVS GANGETICVS
ARACAM
PEGV
REGNI CHINA

Fig. 2.4: Blaev's map of South Asia and Central Asia (1650 CE). Source: maps-prints.com

or even because passengers and goods require different facilities. Hence, if for example one asks any mariner plying on the coast of the Bay of Bengal to be transported to Chattogram, he would immediately reply by wishing to know to which *ghat* the inquirer would like to be transported. He is correct, for along the coast of Chattogram lies Barabkunda, Kumira, Chagtai and Sadarghat and 'going to Chattogram' could imply going to any of these *ghats* (Jahan 2004b: 208). Following this simple logic, one could argue that Tamralipti, which was a large port, possibly had a number of *ghats*, which catered to different vessels according to their draught. Very much like the *ghats* of Sadarghat on the north bank of the river Buriganga and Jinjira on its south bank, Harinarayanpur and Deulpota may have served the eastern parts of the kingdom while Tamluk and Natsal may have served the western parts.

Archaeological Findings at Tamluk

Having resolved the problem of the exact location of the ancient port of Tamralipti, let us now examine archaeological evidence derived from the site to see if its claim as an ancient port is justifiable. K.N. Dikshit, who conducted the earliest archaeological survey of Tamluk in 1921-1922, was rather disappointed by what he found in the famous port-site mentioned so frequently in the early Buddhist and Classical literature.

> There are few high mounds now left to mark the position of the ancient city, but the mound on which the mission house is situated, another on which the temple of Bargabhima stands and the high mound close to the river bed, from which a hoard of ancient coins was recovered some 40 years ago, must be considered to cover some of the ground occupied by ancient Tamralipta (Dikshit 1921-1922: 74).

Along with the hoard of ancient coins Dikshit refers to (which was a collection of about 350 coins, mostly of the rectangular cast types), terracotta objects from the Shunga period were also recovered from the site in the late 19th century CE.

The Archaeological Survey of India under T.N. Ramachandran

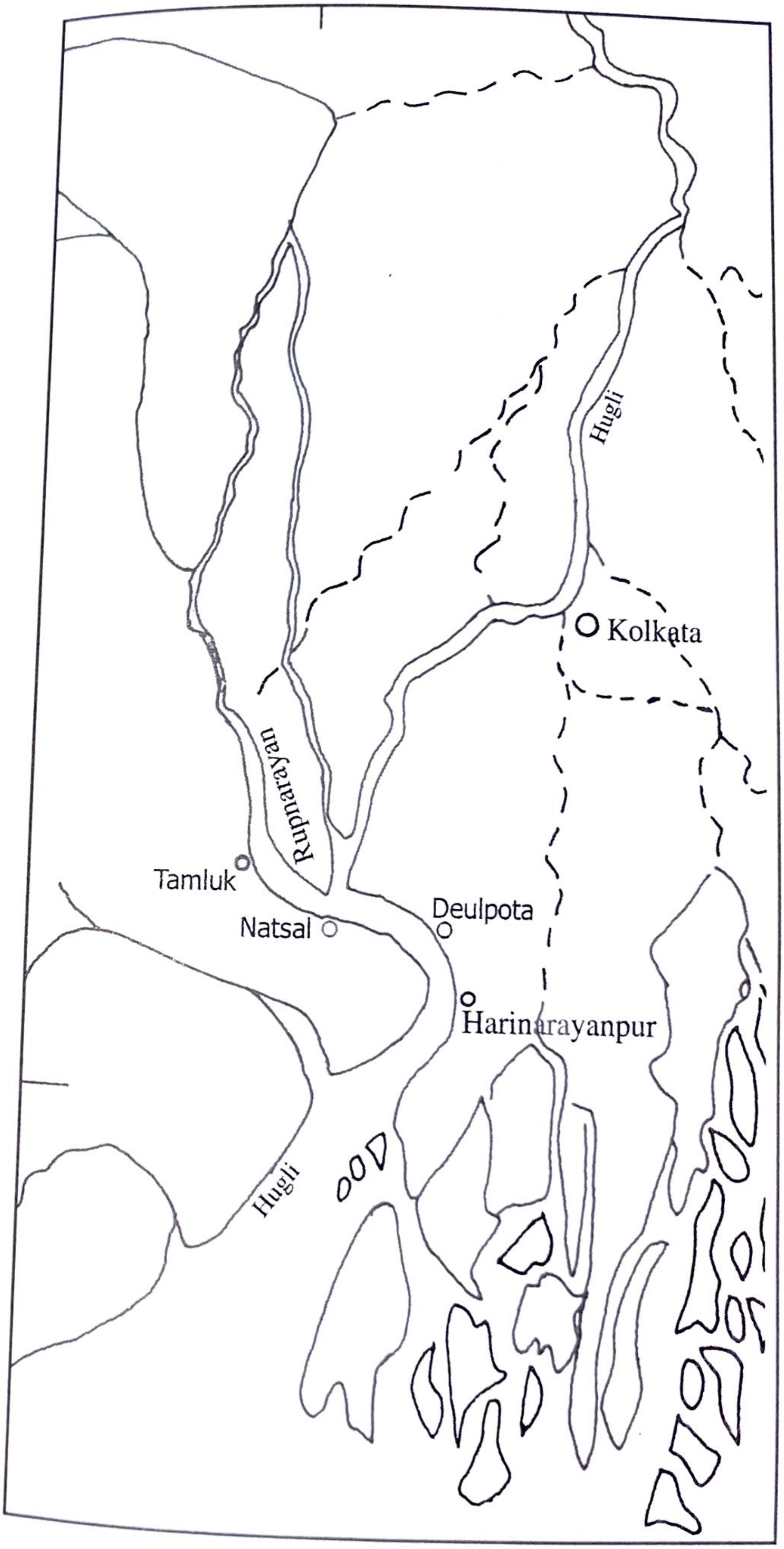

Hugli
Kolkata
Rupnarayan
Tamluk
Natsal
Deulpota
Harinarayanpur
Hugli

Fig. 2.5: The locations of Tamluk, Natsal, Harinarayanpur, and Deulpota, West Bengal, India

conducted the first archaeological excavation at the site on a small scale in 1940 (Ramachandran 1951: 226-239; Sharma 1953: 155). Next, the Eastern Circle of the Archaeological Survey of India conducted two more small-scale excavations: first in 1954-1955 and subsequently in 1973-1974 (IAR 1954-1955: 19-20; 1973-1974: 33). The excavations revealed that the site had been occupied from the Neolithic to the modern times with occasional breaks.

From then, a number of explorations in and around the principal site of Tamluk revealed a cluster of 28 sites of unspecified dimensions, mostly on the banks of the Rupnarayan, Hooghly and Haldi (Sengupta 1996: 118) with a number of cultural materials from the Neolithic-Chalcolithic to the Pala-Sena period. Some of the important sites, which stand near Tamluk, are Amritaberia, Natsal, Badur, Nandigram, Natpatia, Raghunathbari and Ratulia. Others, such as Tilda, Karnaji, Bahiri, Tikasi and Panna are situated farther away. Findings consists of ill-fired and hand-made pottery, Black and Red Ware, Red Ware, Burnished Black Ware including a Black Ware shard depicting a boat, microliths, polished Neolithic celts (triangular and sub-triangular shapes), finished stone tools (hand axes), copper and bronze rings, bangles, bone tools (including points, awls, harpoon with incised boat-motif, fish hooks, arrow-head) from the Neolithic-Chalcolithic phase; Northern Black Polished Ware (NBPW), terracotta human and animal figurines, terracotta sling balls, terracotta and semi-precious stone beads, silver and copper punch-marked coins, inscribed as well as uninscribed cast copper coins, remains of a burnt floor with a number of post-holes from the Mauryan period; Northern Black Polished Ware (NBPW), Red Ware, Black Slipped Ware, terracotta human and animal figurines, terracotta plaques depicting Jataka scenes, terracotta sling balls, terracotta and semi-precious stone beads, silver and copper punch-marked coins and cast copper coins from the Shunga period; Rouletted Ware (RW), Red Polished Ware, Grey Stamped Ware, sprinkler, amphorae, earthen knobbed ware (from Harinarayanpur), terracotta human and animal figurines, terracotta plaques depicting Jataka scenes and other objects, terracotta beads, semi-precious stone beads including etched variety, bone beads, pearl and glass beads, seals with Kharoshti-Brahmi inscriptions, a terracotta votive tablet with Eurulon inscribed on it, a terracotta plaque depicting a soldier in Roman kilt, a terracotta double-headed deity, carnelian intaglios, amphora-like objects, terracotta votive carts, a terracotta tablet with alleged Greek inscription, sprinklers and a few terracotta figurines in non-Indian dress, cast copper coins and Puri-Kushana coins, a brick-built stepped tank, a ring-well, a soak-pit and a series of hearths on a floor rammed with brick grits from the Kushana period; moulded pottery, terracotta human and animal figurines, terracotta plaques depicting urban scenes, terracotta and semi-precious stone beads, sealing bearing the legend in late Gupta character, gold coins of Kumaragupta and Vishnugupta from the Gupta period and pottery with Ramayana panel, terracotta plaques, old Bengali inscriptions on clay tablets from the Post Gupta period has been revealed from the explorations and excavations in and around the site of Tamluk (IAR 1954-1955: 19-20; 1955-1956: 62; 1956-1957: 61; 1973-1974: 33 and Sengupta 1996: 118-119). Stray pieces of sculpture belonging to Pala and Sena periods and an inscribed seal with a seated Devi image of the early Pala period have also been obtained from surface collection (IAR 1954-1955: 20 and 1955-1956: 62).

Indicators of Tamluk as a Maritime Port

Of all the materials discovered so far at Tamluk, Northern Black Polished Ware (NBPW), Rouletted Ware (RW), Stamped Ware, semi-precious stone beads such as agate, carnelian, onyx, amethyst, jasper, quartz, amber and crystal (especially the etched carnelian variety), Indo-pacific glass beads as well as terracotta seals and sealing with Kharoshti-Brahmi inscriptions deserve special attention. By examining the distribution pattern of the above-mentioned materials, Jahan (2002: 127-138; 2004b: 211-215; 2006: 9-18; 2010b: 5-16; 2012: 205-228 and 2016: 304-310) clearly shows that these are definite indicator of maritime contact between Tamluk and other coastal sites in South Asia (Bangladesh, India and Sri Lanka) and Southeast Asia (Myanmar, Thailand, Malaysia, Vietnam and Indonesia).

In addition, a number of artifacts of Mediterranean origin and/or syncretic objects indicating Greco-Roman influence have been reported from Tamluk and its surroundings. One of these is clay sealing carrying three lines of an inscription in Greek. It was found at Tilda (Medinipur district) and has been identified as a votive tablet. The word "Eurulon" has been read in the middle line and has been interpreted as "the East wind that comes with the dawn" (IAR 1955-56: 62). The sealing, dated to the 2nd century CE, is believed to have belonged to a Mediterranean sailor who had voyaged to the Ganga delta (Gupta 1997: 314). Other objects include a terracotta plaque depicting a soldier in Roman kilt, a terracotta double-headed deity wearing helmet (dated to the 1st century CE), carnelian intaglios with non-Indian motifs, some amphora-like objects, terracotta ram-shaped votive carts, some female figures possibly wearing Greek *chiton*, a terracotta tablet with alleged Greek inscription, sprinklers and a few terracotta figurines dressed in tunics, trouser like apparel, high boots, sandals, conical cap, diadem and tiara (Sengupta 1996: 120-121, IAR 1954-55: 20 and 1955-56: 62). The double-headed deity is believed to be Janus and is held by the Asutosh Museum of Indian Art in Kolkata (Fig. 2.6). One of the amphorae, measuring 66 cm and reportedly collected from Karnaji village, is now held in a private collection at Dharas in Medinipur district (Sengupta 1996: 121). The sprinklers are believed to be Roman and have been dated to the 1st-2nd century CE (IAR 1954-55: 20). Also worth noting are the seals with Kharoshti-Brahmi inscriptions, quite a few of which have been found at and around Tamluk.

Discovery of the artifacts of Mediterranean origin from Tamluk and its neighbourhood, when all Greco-Roman accounts are silent regarding Tamralipti, is curious, to say the least. It is all the more curious when we remind ourselves that there is no reference to direct contact between Roman Egypt and Bengal. More importantly, not a single Roman coin has yet been discovered anywhere in Bengal whereas these coins have been found in large numbers at all the major port-sites in the western coast as well as the southeastern coast of India and Sri Lanka. It is well established that Roman trade and Roman coins went together. We also need to consider details on sailing schedules given in the *Periplus of the Erythraean Sea* (Section

39: 13.12-13) that ships from Egyptian ports on the Red Sea usually began their voyages for South Asia in July. Sailing with the help of the south-west monsoon winds, they crossed the Gulf of Aden and reached the west coast ports of South India in September or in October. Their return journey, which had to be made with the northeast monsoon winds, began in the month of November (December or January according to Pliny's *Natural History*, Book VI, c. 23.26). Hence, the merchants had one to three months time for transaction of business, which involved selling their merchandise and loading their ships with goods from local markets. Sailing down to Sri Lanka, which offered local goods at cheaper price, was problematic because it entailed the risk of missing the northeast trade winds and spending a year here, waiting for the next northeast trade winds. Discovery of a large number of Roman artifacts at Arikamedu indicates that the port was possibly a Indo-Roman emporium, which sent goods to the Roman Empire through the west coast ports. Clearly, the nautical technology of the 1st century CE, that was dependent on the trade winds in the Indian Ocean, did not or could not permit direct trade between the Roman world and Bengal. We also need to take into account that the *Periplus of the Erythraean Sea* (Section 60) does not mention items of import from the Roman Empire into the Ganga country, though it specifies which items were exported from the latter. For the die-hard skeptics, one can cite Strabo, who, in his *Geography*, Book XV, Sec. 4 states that "[t]he merchants of the present day, who sail from Egypt to India by the Nile and the Arabian Gulf have seldom made a voyage as far as the Ganges" (McCrindle 1979: 9).

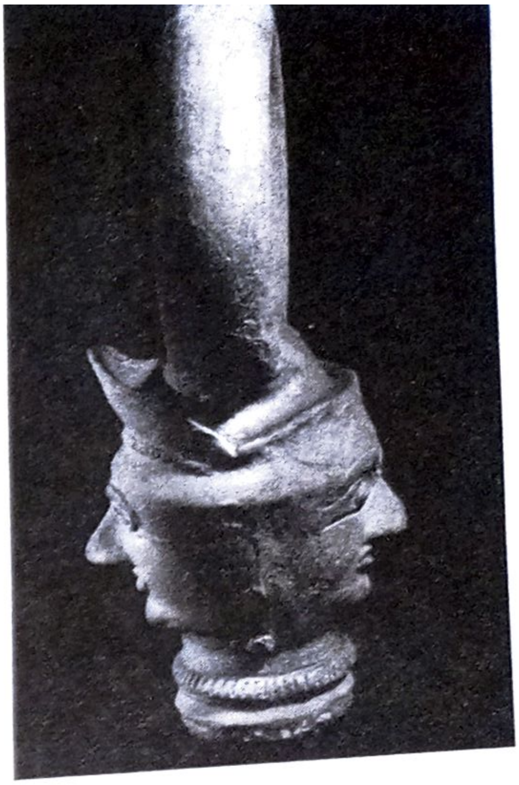


Fig. 2.6: A terracotta double-headed deity (Janus?) from Tamluk. Courtesy: Asutosh Museum of Indian Art in Kolkata, West Bengal, India

Hence, a straightforward conclusion that the artifacts mentioned above indicate maritime trade may be premature. We need to carefully weigh evidence regarding maritime routes and commodities traded before arriving at a firm conclusion. We also need to remember the historical existence of Greco-Bactrian kingdoms in and beyond the north-western frontiers of South Asia and need to consider whether these materials were syncretic objects indicating indirect Greco-Roman influence. Nevertheless, all the evidence of Mediterranean origin go to confirm the indications derived from the story of Mitragupta in the Dandin's *Dashakumaracharita*. There can thus be no doubt that not only the Chinese, but also people of other origins frequented Tamralipti. The Yavanas of the story of Mitragupta may well have been the Romans, the Greeks, Egyptians or Bactrians. The seals with Kharoshti-Brahmi inscriptions also indicate the presence of Kharoshti-knowing people at Tamralipti.

Apart from all the objects discussed above, Tamluk has also yielded coins right from the Maurya period. These include silver and copper punch-marked coins, cast copper coins and a large number of uninscribed cast copper coins. Beside these, Puri-Kushana coins and two gold coins of Kumaragupta and Vishnugupta have also been reported from the site. Because metallic currency is of high value and low volume medium-of-exchange and hence easier to carry over a long distance, their existence implies trade, particularly long distance (including maritime) trade. Hence, discovery of coins at Tamluk may be accepted as an important indicator that the site functioned as an exchange centre.

Tamralipti at Tamluk

Having reviewed the archaeological findings at Tamluk and observed their distribution pattern, we are now in a position to ascertain the implication. Firstly, all the objects discussed above (except the coins) bear commercial value or sign of commercial value. Secondly, their distribution patterns indicate transportation by means of maritime mode of communication. Thirdly, the presence of coins implies the existence of a money-based economy at the site from the 3rd century

BCE to the 6th century CE. All these indications can only lead to one conclusion that Tamluk was a maritime port.

Since (i) South Asian and Chinese literary sources indicate that Tamralipti was located near the seashore of Bengal on the bank of the river Ganga; (ii) physiography in and around Tamluk ideally suits its claim as the site of the ancient port and (iii) archaeological findings at the site justify the claim, we may conclude unhesitatingly that the maritime port of Tamralipti was indeed located at Tamluk.

Physical Condition of the Port

As argued earlier, the port city of Tamralipti was spread over a large area extending from Tamluk on the west bank of the Rupnarayan, Natsal on the west bank of the Hooghly, along with Harinarayanpur and Deulpota on the east bank of the Hooghly. We do not have enough data to ascertain exactly why this was so but surely Tamluk, Natsal, Harinarayanpur and Deulpota all served as harbours. Since no man-made installation indicating the existence of a harbour has been unearthed we may assume that no jetties were constructed at the harbour. This is a typical feature of all estuarine ports of South Asia built during the pre-modern times. We may also believe that ships with shallow draught were anchored at riverbanks in a manner still seen in riverine ports of Bangladesh and West Bengal, India, where wooden planks are used to cross over to the shore. Larger ships may have anchored at a distance from the coast and goods may have been ferried across to the shore in smaller crafts.

Trial trenches dug in some of the high mounds Dikshit referred to, and at a few other sites revealed no structural remains. Remains of a burnt floor (made of rammed brick grits) with a number of post-holes from the Mauryan era, a brick-built stepped tank, a ring-well, a soak-pit and a series of hearths on a floor rammed with brick grits from the Kushana period are all the structural remains that have so far come to light (IAR 1954-55: 20 and 1973-74: 33). Curiously, no structural remains have been unearthed from the Gupta age. Considering the reputation of the ports, these are scanty remains. The series of hearths may indicate a potter's kiln and hence may be taken to indicate the existence of production centres of earthenware. Considering the fact that shards of Northern Black Polished Ware (NBPW), Rouletted Ware, Stamped Ware and Red Polished Ware have been found, we may imagine that some or all of these were produced at or near the port-site. The brick-built stepped tank, the ring-well and the soak-pit indicate daily-life public usage. The burnt floor with a number of post-holes possibly indicates some temporary structure built on wooden posts. We are not certain if the structure was built for residential, commercial or administrative purposes. It could have been used even for storage. No sign of the fortified area, signifying the administrative centre, has been found. If there was an exchange-centre at or near the port, remains of the shops have also not come down to us. It appears that all structures built at the port for administrative, commercial and residential purposes were made of wood, earth and thatch. The image of the port thus derived, vague and sketchy though it is, does not agree with *Katha Sarit Sagara*, not even with the accounts provided by the three Chinese priests. We may consider *Katha Sarit Sagara* (composed in the 11th century CE) as a product of creative imagination coloured by glamorized fantasies of later times. But surely one could expect to find a mound indicating one of the monasteries that the Chinese accounts inform us about unless it has been completely washed away.

Untill further material remains are unearthed through detailed horizontal excavations, we have to be satisfied with the extremely fragmentary image of Tamralipti provided by archaeological evidence that has so far come down to us. And this image is of a typical temporary riverine landing site such as Nagarbari on the bank of the Jamuna in Pabna (Bangladesh). Nagarbari, till the Bangabandhu Bridge, also known as Jamuna Multipurpose Bridge was inaugurated in June 1998 (Fig. 2.7), was a riverine port for country boats transporting various commodities from and to north Bengal and a ferry point for transporting vehicles and passengers from Dhaka to north Bangladesh. It had virtually no administrative importance. However, it had a hive of restaurants serving the passengers who were ferried across and godowns (warehouses) owned by merchants for storing their commodities to be shipped in country boats. The landing site had to be shifted a number of times due to river erosion, and each time the shops and the godowns also shifted. Importantly, when the port was shifted, it hardly left any mark on the old site because the shops and the godowns (constructed with temporary materials such as corrugated iron sheets, bamboo and wooden posts) were shifted *enmasse*. We may suggest that Tamralipti, a maritime port, was not an administrative centre but served mostly as a point for embarkation and disembarkation of passengers and loading and unloading of commodities. It was also a production centre for manufacturing pottery as the hearth unearthed testifies. Consequently, the structures constructed were meant for storing commodities, serving passengers and mariners and producing pottery. Most of these must have been constructed out of perishable materials such as mud, bamboo and wooden posts and thatch roof. A few plinths may have been made of rammed brick grits and their signs still remain.

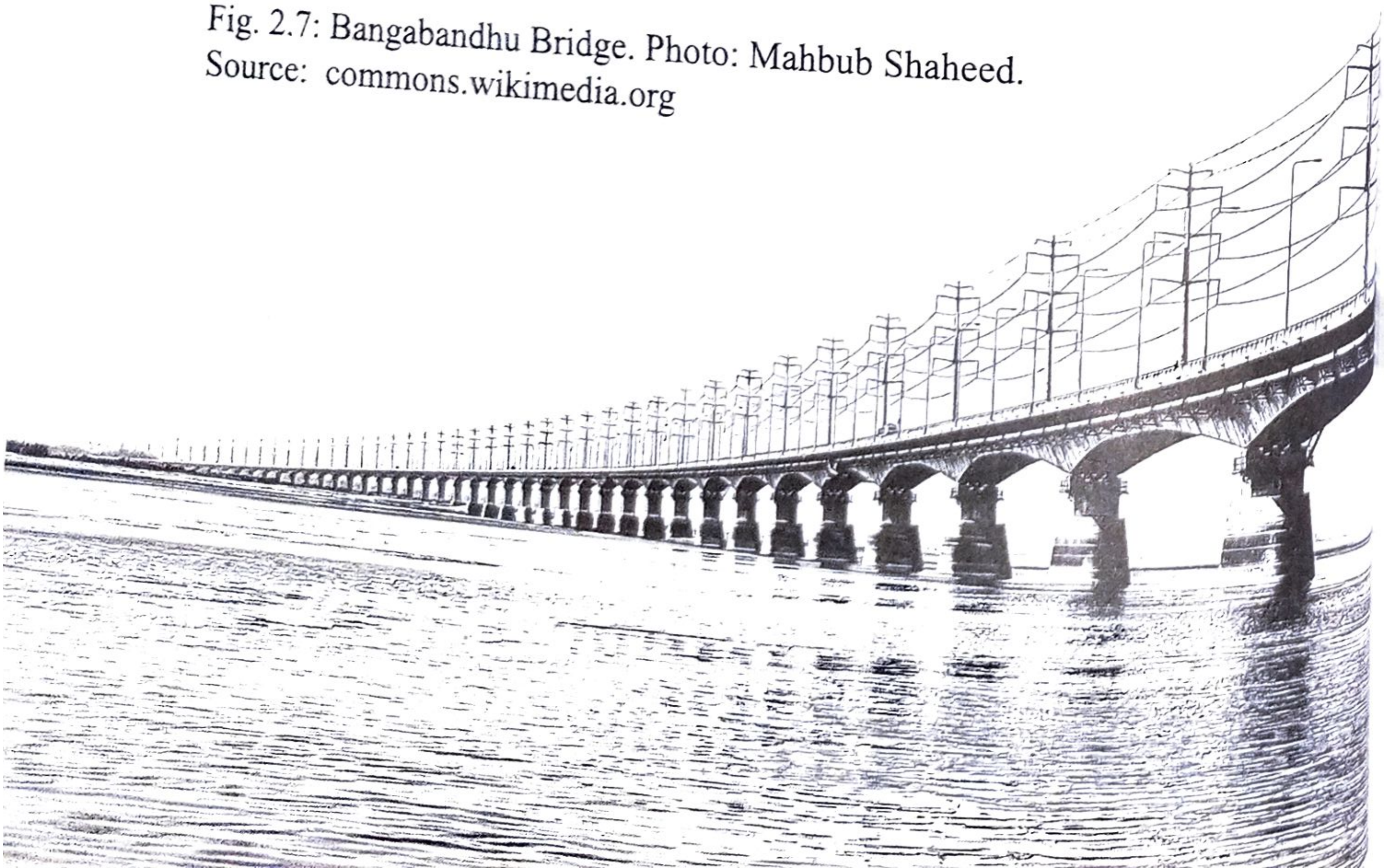
Period of Operation

Literary, geographical and archaeological evidence presented above, definitely prove that Tamluk was the ancient port-site of Tamralipti. Archaeological materials belonging to the Neolithic-Chalcolithic period indicate that the site did not suddenly grow into prominence in the early historic times but had an earlier history. It may have been important for a seafaring community, who may have abandoned it for some unexplained reason. Material evidence mentioned above clearly signifies that the port rose into prosperity from the 3rd century BCE to the 3rd century CE. Most of the artifacts that signify trade have been found during this span of time. Archaeological materials that have been found from the 4th century CE to the mid-8th century CE are mostly terracotta figurines. No materials, which can indicate trade as in the earlier levels, have been found in the later periods. Clearly, this is indicative of a significant decline in trade-related activities in Tamralipti. This must be the reason why Faxian, Xuanzang and Yijing are silent about the port town and maritime trade. The Dudhapani Rock

Inscription of Hazaribagh, which records the name of Tamralipti for the last time, is an important indicator of the state of the port in the 8th century CE (the assigned date of the inscription based on the paleographic grounds). As recorded in the inscription, "once upon a time three brothers – Udayamana, Sridhautamana and Ajitamana – merchants, went on business from Ayodhya to Tamralipti", where they "made plenty of money" (verses 4-5, Kielhorn 1894: 344). Interestingly, the 8th century inscription remembers Tamralipti not as a port of contemporary times but as a place of past glory (note "once upon a time") where north Indian traders could make "plenty of money". Hence, there can be little doubt that Tamralipti must have ceased to exist as an active port in the 8th century CE.

One of the major causes for the decline was perhaps the eastward migration of the Bhagirathi-Hooghly. Because of the migration around 700 CE, the Rupnarayan was reduced in water discharge from Kolaghat to Geonkhali. Tamralipti, which lay between these two points, also lost navigability, leading to decay in the port. The break-up of the Roman Empire in 476 CE and subsequent unsettled relationship between the Eastern Roman Empire and the Sassanid Empire resulted in the loss of the most important market in the west for Tamralipti. Political anarchy that engulfed Radha, Pundravardhana

Fig. 2.7: Bangabandhu Bridge. Photo: Mahbub Shaheed.
Source: commons.wikimedia.org



and Vanga during the period of free for all or *matsyanayaya* (c. 650 CE to 750 CE) and consequent absence of security, may also have contributed to the fall of Tamralipti.

The findings presented above leave little doubt that Tamralipti, cited in the South Asian and Chinese accounts, was indeed located at Tamluk. It was an estuarine port with no permanent quays and wharves. The socio-economic environment of the port included production centres as well as commercial centres. It was well connected with South Asian and Southeast Asian ports and functioned from the 3rd century BCE to the mid-8th century CE.

Chapter Three

The Maritime Port of Gangê in Early Bengal

The ancient port of Gangê or Ganges, frequently mentioned in Greco-Roman accounts, has attracted the attention of several scholars during the last century. Heeren (1846) located the site near the village of Duliapur (about 64 km southeast of Kolkata on a branch of the Ichamati River). Wilford (1822) located it at the confluence of the Ganga and the Brahmaputra, Taylor (1847) in the neighbourhood of Sonargaon, ancient Suvarnagrama), Cunningham (1871) at Jessore and others near Kolkata or about 48 km upstream along the river Hooghly, near Chinsurah (Sastri 1927: 174-175). Sircar (1971: 172-173) located it at Gangasagar, Schoff (1995: 255) at Tamralipti, and Rudra and Mukherjee (1986) located it at Harinarayanpur. In this wilderness of suggestions, Goswami (1966: 43) proposed that "the site of Chandraketugarh seemingly represents the ancient market town of Ganges of the *Periplus*". Subsequently, several scholars including Ray (1979) and Sengupta (1996: 121) supported Goswami's proposition.

Unfortunately, no scientific research has been carried out that takes into account all available data in order to arrive at an acceptable solution to the problem. This essay attempts to address this issue. It examines the location of the port, condition of the harbour and the period of its operation based on literary, geographical, geological and archaeological evidence.

Literary References to Gangê

In the mid-2nd century CE, Ptolemy (Klaudios Ptolemaios) in his *An Outline of Geography* clearly locates three cities in the Gangetic region. These were Palimbothra, Tamalites and Gangê.

> Palimbothra, the royal residence: 143° 27°
> Tamalites: 144°30′ 26°30′
> All the country about the mouths of the Ganges is occupied by the Gangaridai with this city- Gangê, the royal residence: 146° 19°15′
> (Ptolemy's *Geography*, Book VII, Cap. 1, 73, 81)

There can be little doubt that Palimbothra (modern Patna) is a transcription of Pataliputra, the ancient capital of Magadh. There is also little dispute that Tamalites was the ancient port of Tamralipti. As Sastri (1927: 167, 169-170) shows, "[t]he Pali form of the name was Tamalitti, and this accounts for the form in Greek". The third city that Ptolemy identifies is Gangê, the capital of a kingdom occupied by the people called Gangaridai. Although Ptolemy does not refer to ports, what we cannot ignore in his account is that Gangê was not Tamalites (Tamalitti or Tamralipti).

Strabo (60 BCE-CE 19 or 24), citing a lost Greek work on geography by Artemidoros, also locates a city named Gangê.

> Ganges descends from the Emodoi Mountains towards the south, and on reaching the city of Gangê turns its course eastward to Palibothra and the mouth by which it enters the sea (*Geography*, Book XV, Section 72; McCrindle 1979: 77).

If we remember that Strabo's account is dated from a period when the Mediterranean world had no direct contact with South Asia, we may forgive him for locating Gangê at or near Prayag (Allahabad). More reliable is the *Periplus of the Erythraean Sea* (60 CE), since it was written at a time when direct voyage from Egypt to south India was established. Describing a coastal route along the eastern littoral of South Asia, the *Periplus of the Erythraean Sea* identifies a port named Ganges on the seashore, next to the land inhabited by the Cirrhadae and other savage races.

> After these [Cirrhadae and other savage races], the course turns toward the east again, and sailing with the ocean to the right and the shore remaining beyond to the left, Ganges comes into view, and near it the very last land toward the east, Chryse. There is a river near it called the Ganges, and it rises and falls in the same way as the Nile. On its bank is a market-town which has the same name as the river, Ganges. … (Section 63; Schoff 1995: 47-48).

Turning to the *Ch'ien Han-shu*, a Chinese text compiled by Pan Ku in the 1st century CE, one learns about a Chinese mission to a western country called Huang-chih with the objective of obtaining lustrous pearls and living rhinoceroses. Although scholars are divided over the location of Huang-chih, Bhattacharyya (1977: 39-40) has followed Karlgren's system of pronunciation to show that Huang-chih should be *Gan-yi* or Ganga. The mission sent by Wang Mang, then a regent of the boy-emperor who later founded his own Hsin Dynasty (9-23 CE), was not as much concerned with commerce as with politics.

> During the Yüan-shih period of [the infant] Emperor P'ing [1-5 CE] Wang Mang was taking over the government and, desiring to display his majestic virtue, he sent costly gifts to the King of Huang-chih, requesting him to dispatch an embassy with a live rhinoceros [or rhinoceroses] (Colless 1980: 164).

All these literary references prove beyond doubt that there existed a port, separate from Tamralipti, which was known to the Romans as Gangê. It was located on the seashore, on the bank of the river Ganga. It was possibly the same as Huang-chih of the Chinese accounts. As shown below, physiographic conditions of Chandraketugarh ideally suit its claim to be the site of the ancient port.

Physiography of Chandraketugarh

Chandraketugarh is the name of a near-rectangular area enclosed by a gigantic rampart wall made of earth (Fig. 3.1). It is located some 35 km northeast of Kolkata, at the village of Berachampa (Devalaya), which lies within the jurisdiction of Deganga police station under North 24-Parganas district, West Bengal, India. The rampart wall was built, as per local tradition, by a local ruler Chandraketu of the medieval period, as a defensive measure against militant incursion of a Muslim saint named Shah Syed Abbas Ali alias Gorachand. Since the discovery of archaeological remains at and around Berachampa, the entire site of the discovery was soon termed as Chandraketugarh (22°41′52″ N & 88°41′18″ E). The site is spread over approximately 4.5 km^2 in the villages of Berachampa (Devalaya), Ranakhola, Ghorapota, Dhanpota, Chuprijhara, Singer Ati, Shanpukur, Jhikra, Mathbadi, Hadipur and Gajitala. Other villages such as Ramnagar, Adampur, Piyara, Panditpol, Peelkhana, Haroa, Majer Ati, Atghara, Gazirhat, Bashabati, Khas Balanda, Uttar Ranigachi, Bhangore, etc. are all situated south of Berachampa and are associated with the site of Chandraketugarh because they yielded similar archaeological material. The gigantic rampart wall of Chandraketugarh indicates that it was once a fortified city.

Physiographic features of Chandraketugarh and its neighbourhood demands particular attention for reconstruction of its past. Although North 24-Parganas district is situated in the mature segment of the

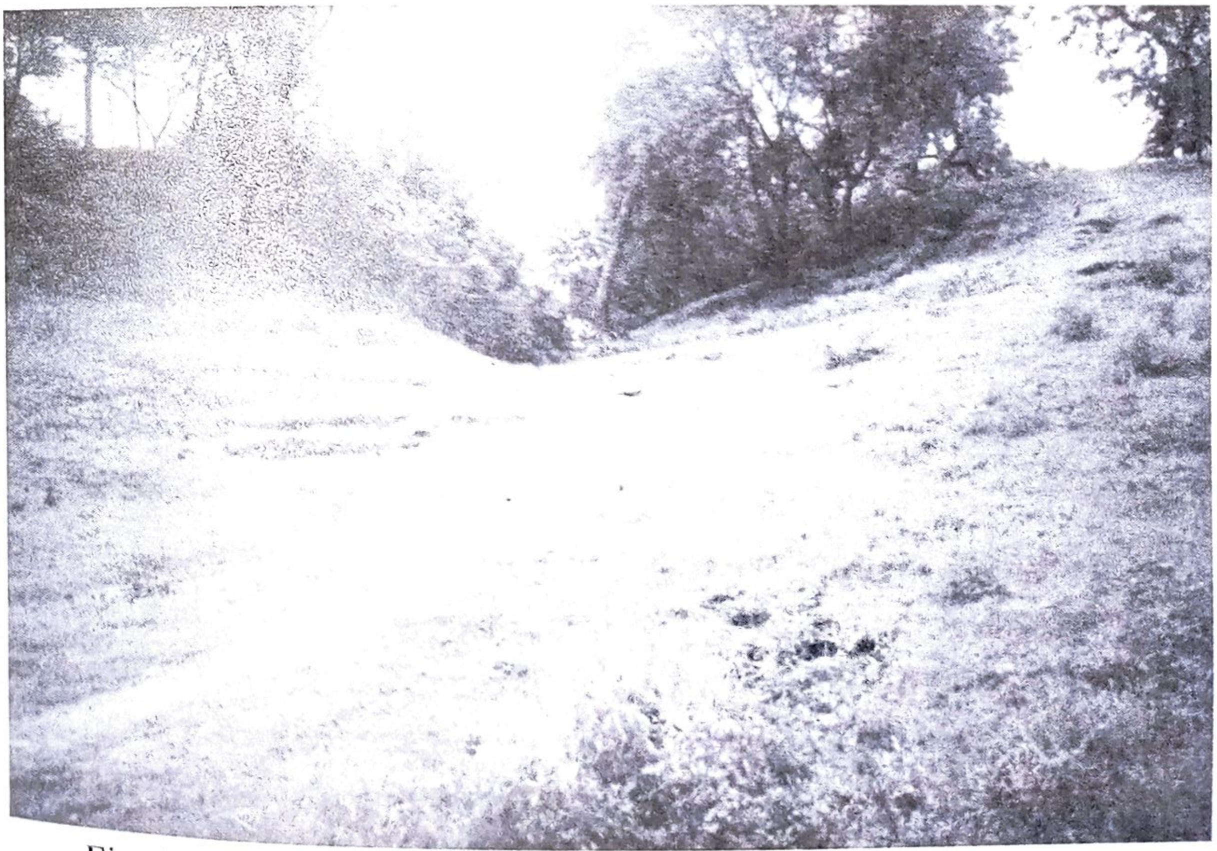


Fig. 3.1: Rampart of Chandraketugarh, North 24-Parganas district, West Bengal, India. Photo: Shahnaj Husne Jahan

Ganga delta proper, the site itself rests on the Katwa surface, which is the oldest and highest formation in the surrounding region, the average height of which is higher than the present flood level. Semi-perennial channels drain Chandraketugarh and its neighbourhood. Monsoon run-offs and tides sustain these channels. Previously, a major distributary of the Bhagirathi flowed here, and discharged into the Bay of Bengal through the Raimangal-Harinbhanga estuary. It is now nearly dry, and the Bidyadhari flows from west to south about 10 km from the site. Rudra (1990: 250) reminds us, "[d]uring the 2nd century CE, Bidyadhari was one of the five important outlets of the Ganga water and carried considerable discharge towards the sea. Hence Ptolemy named its estuary as Mega or great". About 3 km to the north and east of Chandraketugarh, flows a tributary of the Ichamati known as the Padma. At present, both the rivers are not connected to the Bhagirathi. The region is spotted with numerous marshes and *beels* (shallow lakes) that contain more water than the Bidyadhari and the Padma. Backwaters and oxbow lakes of the two nearly dry rivers influenced the creation of these marshes and *beels*. A number of palaeochannels are distributed over this area, pointing to extensive lateral river migration. Thus, the physiography of the site indicates the possibility of the existence of a maritime port at Chandraketugarh, on the banks of the Bidyadhari. Archaeological findings discussed below amply supports this claim.

Archaeological Findings at Chandraketugarh

Archaeological investigation of the site began in the early 20th century. In 1907, A.H. Longhurst of the Archaeological Survey of India visited Chandraketugarh. However, his report was disheartening. Having found only fairly large size bricks, 38.1 cm long by 27.9 cm broad and moulded bricks and pottery assignable to an early period, he was of the opinion that the ruins were of little or no interest (*Annual Report of the Archaeological Survey of India, Eastern Circle* 1906-1907: 12). Two years later R.D. Bannerji visited the site with his team and recorded some antiquities, mostly of terracotta and a few metallic fragments. These included a fragment of a silver vessel, a fragment of a copper jar badly eroded, a terracotta plaque representing reeds tied with three bands, a terracotta plaque depicting the lower part of the legs of a women wearing anklets, a steatite seal bearing the letter *ma* in Northern Brahmi script of the 2nd or 3rd century BCE, a terracotta spire of roof, a terracotta spindle-whorl and a fragment of the fore-part of a terracotta figure of a lamb (Banerji 1911: 16-17). In 1911, Nagendra Nath Vasu collected six cast-copper coins for the Museum of the Vangiya Sahitya Parishad, Kolkata (Haque 1996: 42). Growing interest in Chandraketugarh is reflected in the brief exploration report on Chandraketugarh published in 1922 by Dikshit (1922-23: 109-110). After a few more scattered explorations, the Asutosh Museum of Indian Art, University of Calcutta carried out a thorough exploration of the site in 1955-56.

Archaeological investigations were intensified from 1956-57 to 1967-68 when the Asutosh Museum of Indian Art of the University of Calcutta carried out a series of regular excavations in five locations at Chandraketugarh. The locations are: (i) Berachampa (west of Berachampa-Haroa Road), (ii) Khana Mihirer Dhibi, a 4.25 m high mound northeast of Berachampa (north of Barasat-Bashirhat Road), (iii) Itakhola (west of the Berachampa-Haroa Road), (iv) Noongola (between Khana Mihirer Dhibi and Itakhola) and (v) Hadipur (a village outside the fortified area in the southern quarter of Chandraketugarh). A comprehensive picture of all antiquities unearthed in the Asutosh Museum excavations (now held in the collection of the Asutosh Museum of Indian Art and the State Archaeological Museum, Kolkata) as well as other antiquities collected from surface findings by local inhabitants (now held in a number of private collections in North 24-Parganas district, West Bengal, India) is given below.

Red Slip Ware, Painted Grey Ware (coarse), Red and Buff Ware, Buff Ware (coarse), terracotta human and animal figurines from the pre-Mauryan period; Northern Black Polished Ware (NBPW), Rouletted Ware, Stamped Ware, Grey Ware (fine), Black Slipped Ware, Black and Red Ware, terracotta human and animal figurines, semiprecious stone beads, terracotta beads, ivory beads, ivory bangles, copper and ivory antimony rods, bone objects, ivory objects, lime-stone animal figurine, steatite seal bearing the letter *ma*, silver and copper punchmarked coins, billon punchmarked coins, cast copper coins, uninscribed cast copper coins from the Mauryan period; Northern Black Polished Ware (NBPW), Rouletted Ware, Stamped Ware, Grey Ware, terracotta human and animal figurines, terracotta plaques, semiprecious stone beads, bone beads, awls and cosmetic sticks of bones and ivory, bone objects including one with Brahmi script, a terracotta sealing with the legend sadada in Brahmi, steatite casket, cast copper coins, uninscribed cast copper coins from the Shunga period; Northern Black Polished Ware (NBPW), Rouletted Ware, Stamped Ware, Grey Ware including spouted cups, bottle-necked sprinkler, narrow-necked cylindrical vases, amphorae (Fig. 3.2), Red Slip Ware, Red Ware, Black Ware, Black Slipped spouted cups, terracotta human and animal figurines, plaques, tablets on various themes, semiprecious stone beads, glass beads, bone beads, copper antimony rods, awls of ivory, copper and bones, copper bowls, wooden decorative pieces, a broken bowl of polished agate, seals and sealings with Kharoshti-Brahmi inscriptions, cast copper coins from the Kushana period; Grey Ware, Stamped Ware, Black and Red Ware, Black Ware, Red Ware, terracotta human and animal figurines, terracotta plaques, ear-studs, semiprecious stone beads, glass beads, terracotta beads, shell and ivory bangles, awls and gaming dice of bone, ivory casket, an iron axe, earthen

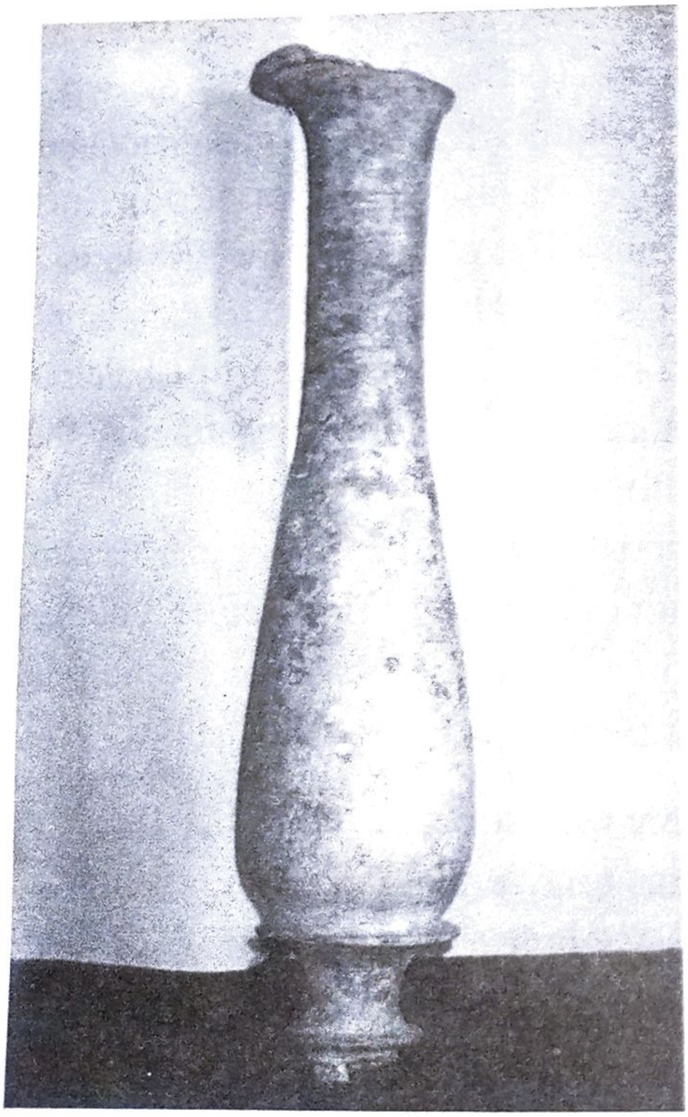


Fig. 3.2: Amphora from Chandraketugarh.
Photo: Shahnaj Husne Jahan

lamps, the lower part of a small sandstone Surya plaque, a stone inlaid silver and a plain copper ring, saddle-quern with pestle, a plano-convex sealing with Brahmi script, a mutilated sealing with inscription *ye dharma hetu*, seals and sealing with Kharoshti-Brahmi inscriptions, cast copper coins, a silver coin of Kumaragupta and a gold coin of Chandragupta from the Gupta period; and terracotta spindle-whorl, semiprecious stone beads, bone beads, terracotta beads, conch-shell bangles, a mutilated bust of Vishnu in sandstone, black basalt *chakra* of Vishnu, a stone Vishnu plaque from the post-Gupta period have so far been reported from the explorations and excavations at Chandraketugarh. Besides, a few figurines of the Buddha, datable to the Pala period, have also been reported from stray findings (now held in a private collection in Haroa). These materials would have been of little interest for this research had they not included indicators of maritime trade discussed below.

Indicators of Chandraketugarh as a Maritime Port

Of all the materials discovered so far at Chandraketugarh, Northern Black Polished Ware (NBPW), Rouletted Ware, glass beads, semi-precious stone beads made of agate, carnelian, onyx, amethyst, jasper, quartz, chert and garnet (specially the etched variety) and terracotta seals and sealing with Kharoshti-Brahmi inscriptions deserve special attention. Like Tamluk, as shown in Jahan (2002: 127-138; 2004c: 92-96; 2010b: 5-16; 2012: 205-228 and 2016: 304-310), all these materials are indicator of maritime trade and have also been found in one or more early historic coastal sites in Bangladesh, India, Sri Lanka, Myanmar, Thailand, Malaysia, Vietnam, and Indonesia. Because the geographical location of the sites is on the coast or on the banks of rivers navigable by maritime vessels, it is arguable that these materials indicate Chandraketugarh's contact with the coastal and riverine sites of South and Southeast Asia by means of maritime mode of transportation.

Quite a few stamped potsherds have been found at and around Chandraketugarh. One of these (now held at the State Museum, West Bengal and bearing accession no. T 549) is a shard measuring 13 x 4 cm. It was found at Chandraketugarh and has been dated to the 1st century CE. Stamped near the rim are a lotus and a Kharoshti-Brahmi legend "Salatheotha or Sanas(r)as(r)a". Mukherjee (1990: 52) believes that the legend possibly refers to the potter or owner's name. Another stamped potsherd (now held at the Indian Museum, Kolkata and bearing accession no. 89/47) was found at Hadipur. It measures 8.5 cm in length and has been dated to the 1st century CE. Interestingly the potsherd in question is a fragment of Rouletted Ware of whitish colour. On it is stamped the motif of a lotus inside a circle and a Kharoshti-Brahmi inscription which in translation reads "of Yasa, the Yaksa of grain" (Mukherjee 1990: 54). The same site (Hadipur) has yielded yet another terracotta object (currently held at the Indian Museum, Kolkata and bears accession no. 90/151). It is an amphora-like vessel (18.3 cm high). On it is stamped a Kharoshti inscription that has been read as "Dajadamdadapa". Mukherjee (1990: 57) believes that the inscription is possibly the name of the potter or the owner of the vessel. A grey ware potsherd with stamped leaf design, another with rosette design, and a third with stamped wheel and rosette design, all dating from the Gupta age, have been found in Khana Mihirer Dhibi in Chandraketugarh. Northern Black Polished Ware (NBPW) shards with stamped rosette designs have also been unearthed from Chandraketugarh. The most distinctive Stamped Ware fragment found at the site is a Black and Red ware shard. The decoration on it is seen on the interior just below the rim and is quite similar to Wheeler's Type 10 at Arikamedu (Wheeler *et al.* 1946: pl. LXXII, 6). It consists of a row of stamped medallions with a bird motif engraved within a square panel (IAR 1957-58: 52).

Kharoshti and Kharoshti-Brahmi inscriptions stamped on a few shards is an indicator that stamped wares were locally produced because most of the artefacts bearing similar inscriptions have been found at Chandraketugarh and its neighbourhood. From Chandraketugarh, stamped wares appear to have spread along the western coast of the Bay of Bengal to Sri Lanka. This is indicated by stamped ware shards that have been found at Manikpatna and Radhanagar in Orissa (Pradhan *et al.* 2000: 484), Satanikota in Andhra Pradesh, Arikamedu, Kottapatnam and Alagankulam in Tamil Nadu. Another stamped bowl has been reported from Gedige at Anuradhapura (Deraniyagala 1986: 45). Further specimens of stamped ware in Sri Lanka are several fragments found at Kantarodai. Stamped Ware sailed also to Thailand and Indonesia as testified by shards with stamped floral design reported from Phu Kao Thong in Suk Samran district, Ranong Province, Southern Thailand (Chaisuwan 2007) and a rim shard found at Sembiran on the north coast of Bali.

Footed Ware is another important finding of Chandraketugarh. It is a type of pottery in the shape of a small dish with a flaring out-turned rim and a base or foot shaped as a ring, and with decoration below the rim on the inner surface and on the base. The scheme of decoration invariably consists of a ring of stamped ribbed leaves and a grooved circle or spirals at the centre. They have also been found at Shaikhan Dheri near Charsada in Pakistan and at Arikamedu and Karaikadu on the eastern coast of south India and dated between 100 BCE and 100 CE. Comfort (1991) and Slane (1991) have shown that Footed Ware is not indigenous to South Asia and bears close similarity with wares found in the Mediterranean world. It is possible that they were manufactured at Shaikhan Dheri in the Bactrian Greek kingdom in the northwestern region of South Asia. Begley (1991: 183) argues reasonably enough that "the route of contact between Shaikhan Dheri and Chandraketugarh would have been inland through the Ganga plains, and coastal between Chandraketugarh/Tamluk and locations on the Coromandel Coast". Based on these observations, it is possible to believe that Footed Ware was imported to Chandraketugarh from Shaikhan Dheri in the Bactrian-Greek kingdom by a land route for local use among the elite and was exported from there by sea route to the Coromandel Coast.

Artifacts of Mediterranean influence and/or syncretic objects indicating Greco-Roman influence have been reported from Chandraketugarh. One of these is a broken bowl of polished agate from the Kushana period. The remaining artifacts are all of terracotta. These are a vase with elongated ovoid body and circular rim (Gupta 1997: 32), spouted cups and narrow necked cylindrical vases (IAR 1963-64: 64), a terracotta male head and a terracotta head wearing a laurel leaf-wreath as crown (Chakrabarti 1996: 80), a terracotta plaque showing costumes and armour (Pamphlet on Exhibition on Roman Antiquities in India, Indian Museum, Kolkata, 1993), a terracotta seal depicting a leaping bull, a terracotta head of a bearded warrior with ribbed headgear and a button-seal showing two formalized human figures leaping above a humped bull with outstretched arms on the obverse and a twin-tree with stylized leaves on the reverse.

Of all the artifacts mentioned above, the ovoid vase shows Hellenistic influence, the terracotta plaque shows Greco-Roman influence and the two heads (including the one wearing a wreath of leaves), the spouted cups and cylindrical vases show Roman influence. The motif on the terracotta seal is believed to be a familiar motif in Minoan Crete. The terracotta head of a bearded warrior appears to indicate influence of the Eastern Mediterranean of the 7th-8th century BCE while the button seal indicates influence of the Mediterranean area in general. It is also worth mentioning that agate table wares were fashionable in the Roman world and have also been found at Taxila (Chakraborty 2000: 406).

Finding the artifacts mentioned above is not surprising when we come across several references of Gangê from the Greco-Roman accounts. However, like Tamralipti, no Roman coin has been discovered so far at or around Chandraketugarh. As discussed in the previous chapter, that the sailing schedule in the Indian Ocean was also not favourable to allow direct trade between the Roman world and Bengal. Hence, Chandraketugarh could not have been connected to the Mediterranean world via the Red Sea ports. Having said that, it would be foolhardy to insist on "no contact ever" and overlook Pliny's "*seldom* made a voyage as far as the Ganges." There may have been an adventurous trader or a wayward traveler who happened to land in Bengal. However, such cases cannot be considered as recurrent and repetitive but accidental or the result of chance happening, and hence need not be considered as indicative of a trade route. Rather, it would be logical to believe that they arrived at Chandraketugarh in the same way as the Footed Ware–from the Greco-Bactrian kingdoms in and beyond the

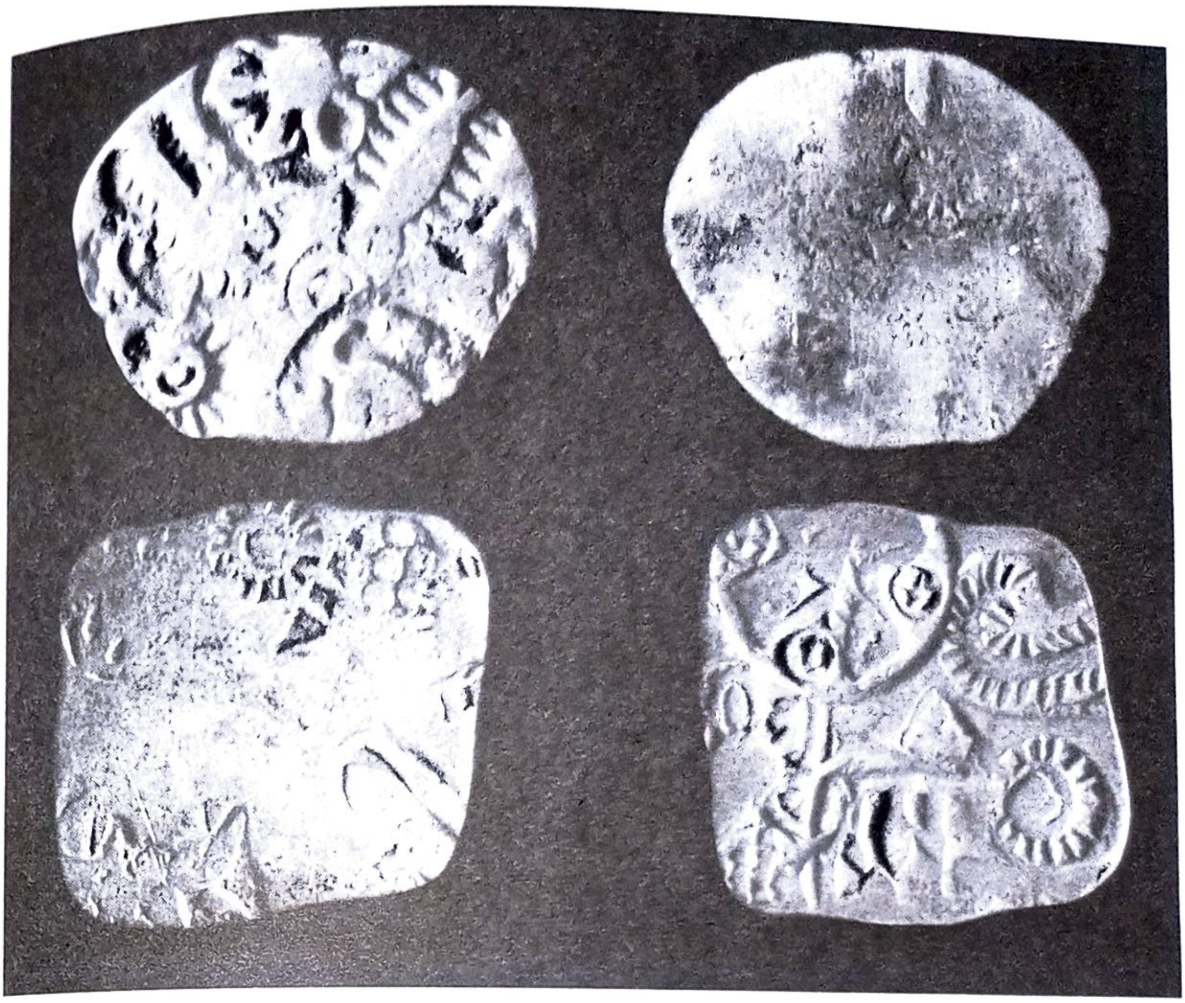


Fig. 3.3: Punch-marked coins from Chandraketugarh.
Courtesy: Asutosh Museum of Indian Art, Kolkata, West Bengal, India

northwestern frontiers of South Asia.

In addition, Chandraketugarh has yielded a large number of coins. These include some silver punchmarked coins (Fig. 3.3), few copper and billon punchmarked coins, cast copper coins and a large number of uninscribed cast copper coins (all dated to the Mauryan period or c. 3rd-2nd century BCE). The inscribed and uninscribed cast copper coins continued to circulate in the Shunga period. Although Imperial Kushana coins have not been noticed at the site, locally minted cast copper coins have been found here. This type of coins, albeit few in number, have also been found from the early Gupta period. Besides these, a gold coin and a silver coin from the Gupta period have also been reported from the site. As mentioned in the previous chapter, existence of metallic currency implies long distance trade and hence, coins of Chandraketugarh indicate that the site functioned as an exchange centre.

Gangê at Chandraketugarh

After discussing the archaeological findings of Chandraketugarh, let us now study the implication. As argued earlier, existence of money-based economy at Chandraketugarh from the Mauryan to the Gupta period along with the presence of commodities bearing signs of commercial value and indication of maritime transportation lead to one inference that Chandraketugarh was a maritime port.

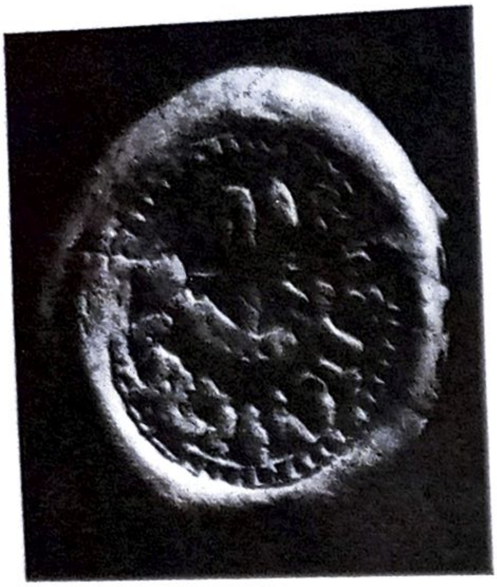


Fig. 3.4: Unbaked clay sealing from Chandraketugarh. Courtesy: Asutosh Museum of Indian Art, Kolkata, West Bengal, India

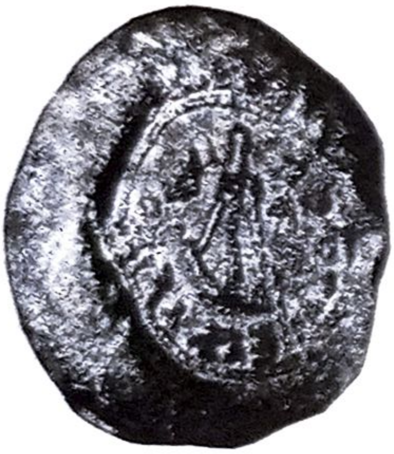


Fig. 3.5: The Trapyaka seal impression from Chandraketugarh. Source: Mukherjee 1990

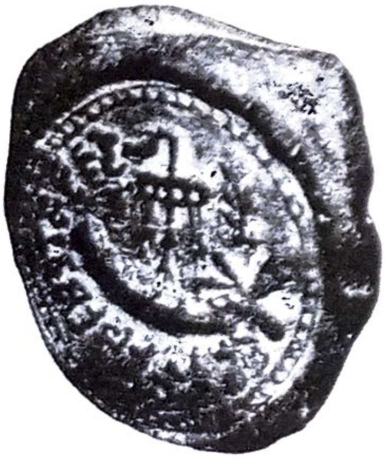


Fig. 3.6: The Grain and Taurine seal impression from Chandraketugarh. Source: Mukherjee 1990

Some of the punchmarked copper coins reported from Chandraketugarh and now preserved in the State Archaeological Museum, West Bengal and Asutosh Museum of Indian Art, Kolkata show a hull of a ship (IAR 1960-61: 70; 1961-62: 107; 1962-63: 46 and 1966-67: 48). One of them is a dolphin type found at Khana Mihirer Dhibi. Its aft section is shaped like a dolphin while the upper tip of the bow appears to be like a dolphin's snout. Furthermore, as De (2001: 147) points out, the ship motif also occurs on a type of billon coins. Six of these coins are preserved in the State Archaeological Museum, West Bengal. The copper punchmarked coins bearing a ship motif further serves to strengthen Chandraketugarh's claim as a maritime port. It is worth further notice that some of the terracotta seals and sealings found at Chandraketugarh also bear ship motifs (Figs. 3.4, 3.5, 3.6, and 3.7). This will substantiate the further assertion made in favour of Chandraketugarh's claim.

The port was well connected, as all the archaeological materials discussed above show, with the ports of Sri Lanka, the eastern coast of India and Southeast Asia. As the *Periplus* indicates that the port was used for exporting "raw silk and silk yarn and silk cloth" from the western state of Ts'in of China to Damirica [Tamil lands] (Section 64; Schoff 1995: 48), it is possible to believe that the port was also connected with T'sin through a land route via Lhasa and the Chumbi Vale to Sikkim (Scoff 1995: 272-273). However, Chinese silk at the port of Gangê/Ganges was not easy to come by because "the land of this is not easy to access; few men come from there and seldom" (*Periplus*, Section 64; Schoff 1995: 48).

Although the Romans called the port Gangê or Ganges, we have no way (as yet) of ascertaining what the local residents called it. Ray (1993: 303-304) added the suffix 'bandar' (lit., 'port') to 'Ganga' (the river) and coined the name 'Gangabandar' for the port. His naming of the port is acceptable (since the name denotes location of the port on the river Ganga), as long as we must remember that the name is provisional and in no way indicates what the port may have actually been called by its local residents. Taking into consideration all the facts mentioned above we may conclude unhesitatingly that the maritime port of Gangê was indeed located at Chandraketugarh.

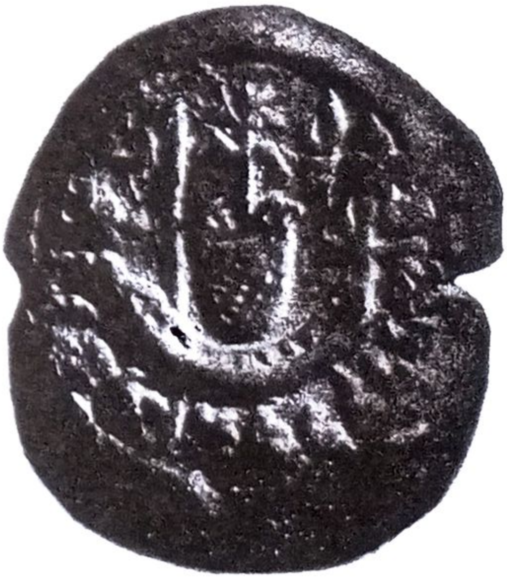


Fig. 3.7: The Indra seal impression from Chandraketugarh. Source: Mukherjee 1990

Physical Condition of the Port

The location of the archaeological site on the bank of a mouth of the ancient Ganga and the description given in the *Periplus of the Erythraean Sea* (cited earlier) indicates that Gangê was an estuarine port. The structural remains at Chandraketugarh from the Mauryan to the Kushana period, summed up in the Table 1 given below, may help us ascertain the physical condition of the port.

The physiographic features of the site discussed above indicate that the harbour of Gangê was situated on the east bank of the Bidyadhari. Since Berachampa is nearest to the river, we may assume that the harbour was concentrated in this area. As no man-made installation indicating the existence of a harbour has been unearthed, we may believe that no jetties were constructed at the harbour.

Excavation report on the remains at Khana Mihirer Dhibi from the Mauryan period informs us that structures were generally built with wooden posts and tiles. Shunga period remains show the use of bamboo in addition to the two mentioned above (IAR 1962-63: 46). Kushana remains from Berachampa add still another building material, i.e. earth used for making the plinth. The structures also seem to have been decorated with pottery finials. If we may add the evidence from Khana Mihirer Dhibi to those of Berachampa, we may believe that the structures at Chandraketugarh were possibly constructed with bamboo or wooden posts erected on a mud plinth. The roof was made of tiles, further decorated with pottery finials (IAR 1956-57: 30; 1958-59: 56; 1959-60: 51). Another type of structural construction was the wattle-and-daub, as a trial excavation at Hadipur revealed. These structures were elaborate house complexes "with tile roofs, mud floors, grain storage enclosures and ring-wells, forming a self-contained unit possibly of a family" (IAR 1965-66: 60).

If contemporary practice in rural Bangladesh; (where residential and commercial structures are still built on mud plinth with bamboo or wooden posts and tiled roof); be accepted as ethnographic evidence, we may assume that the wooden posts in Chandraketugarh were used in structures belonging to affluent families or business concerns while those of bamboo belonged to the less affluent section. Some of the structures belonging to the affluent section of the inhabitants were also

Table 1: Structural remains at Chandraketugarh

Period	Location	Structure
Mauryan	Berachampa	Tile fragments and decomposed wood and bamboo.
	Khana Mihirer Dhibi	House roofs were generally built of tiles with wooden posts.
	Itakhola	A pottery drain and an oblong area enclosed by vertical wooden planks. Signs of destruction of the dwelling houses.
Shunga	Berachampa	A drain of pottery-pipes fitted into each other.
	Khana Mihirer Dhibi	Tile fragments.
	Itakhola	The rampart, built of heaped-up earth. The basal layer of the rampart was composed of *surkhi*, brick-bats and potsherds. A massive wooden structure built of vertical logs set on horizontal planks and a soak-pit found below the rampart proper.
Kushana	Hadipur	Elaborate house complexes of wattle-and-daub type with tile roofs, mud floors, grain storage enclosures and ring-wells.
	Berachampa	A ramp of rammed concrete and a rampart of earth erected on it. Signs of wooden or bamboo structures with tiled roofs, probably having pottery finials and earthen plinth. A massive brick structure built on wooden piles. A small square wooden enclosure, made of tightly-joined horizontal planks, reinforced by beams at the bottom and supported on wooden logs. A thick layer of paddy-husks was found on the horizontal planks.
Gupta	Berachampa	Kiln-burnt bricks.
	Khana Mihirer Dhibi	A massive square-shaped brick temple with miniature shrines on the sides and a *sarvato-bhadra* type polygonal brick temple.
	Noongola	Remnants of brick structures and a ring-well made of thick and large terracotta rings.
Post-Gupta	Khana Mihirer Dhibi	A small brick temple 5.94 m square. Circular brick basements, possibly the remains of votive *stupas*.
Pala	Khana Mihirer Dhibi	Renovation of the upper part of the massive wall of the *sarvato-bhadra* temple. Remains of the plinth of a huge brick-built temple (15.75 m x 29.58 m). Remains of a few structures.

provided with pottery drain pipes used for sewerage, as remains of similar pipes found at Itakhola (Mauryan period) and Berachampa (Shunga period) signify. The Itakhola pipes ended in a wooden reservoir (IAR 1959-60: 51-52, 1956-57: 30 and 1957-58: 51). Using the same ethnographic evidence, we may further postulate that the walls of the structures with wooden posts were made out of wooden planks while those of bamboo were made of interwoven bamboo mats. Some of the houses with bamboo mats may have used hay as roofing; the remains of which would have decayed beyond recognition. Destruction by fire, accidental or by arson, may not have been uncommon because signs of "huge conflagrations which left their mark everywhere" have been found at Itakhola (IAR 1959-60: 51).

There can be no doubt that many of the structures at Chandraketugarh were used for residential purposes. The wattle-and-daub structures at Hadipur must have served such purposes. If we may assume that production of terracotta pottery was family-based, we may believe that many of the houses at Hadipur would have been used for producing Northern Black Polished Ware, Rouletted Ware, Stamped Ware; since a large number of potsherds with Kharoshti-Brahmi inscriptions have been recovered from this area. Many of the bamboo-mat and wooden-plank type of structures at Khana Mihirer Dhibi, Itakhola and Berachampa may have been used for residential purposes. However, there must have been others which served a commercial purpose; as shops, offices of merchants and warehouses. We have observed earlier that literary sources have identified Gangê as a market-town. We may point to one wooden structure unearthed at Berachampa that may have been used as a store by rice merchants. It is described as "a small square wooden enclosure, made of tightly-joined horizontal planks, reinforced by beams at the bottom and supported on wooden logs" (IAR 1963-64: 64). A thick layer of paddy-husks found on the horizontal planks clearly indicates that the structure was used for storing paddy. There must also have been structures used for producing goods. Unfortunately, we cannot as yet identify them exactly. Nevertheless, recovery of lumps of agate and quartz together with some unfinished beads from the Shunga period at Khana Mihirer Dhibi (IAR 1961-62: 63) indicates that there must have been quite a few structures which were used as factories for production of beads.

Gangê was definitely an administrative centre as well, as the rampart quite forcefully testifies. Excavation in the rampart near the Itakhola area revealed that it was constructed in circa 1st century BCE by piling up earth on a basal layer composed of *surkhi*, brick-bats and potsherds. The moat around the rampart was created by digging and piling. A large number of coins found at the basal layer indicates the observance of some sort of ritual at the beginning of the construction. In the 1st century CE the rampart was reinforced. A massive wooden structure built of vertical logs set on horizontal planks and a soak-pit was found below the rampart proper. It is believed to be the foundation of some house complex built in circa 2nd century BCE (IAR 1964-65: 52). We may tentatively propose that the house complex was the residence of the local ruler. The rampart may have been necessary as a measure of protection from external invasion. We are not sure of the nature of the residential construction after the rampart was erected in circa 1st century CE. Tile fragments, and decomposed wood and bamboo, which were found in the sections of the rampart near Bera-champa when accidentally dug by the local people (IAR 1967-68: 50). These date from the Mauryan period and hence could not be from the residential complex of the local ruler. Although we do not have enough material evidence yet to reconstruct the interior of the rampart, one may justifiably believe that the nerve centre of Ptolemy's Gangê lay within the high-rising earthen walls.

Period of Operation

Based on cultural materials obtained from Chandraketugarh, we may firmly conclude that the site was occupied continuously right from the pre-Mauryan to the Pala period without any break. However, as the table above shows, structural remains date from the Mauryan period. From the Mauryan to the Kushana period, the structural remains indicate mundane and secular activities. From the Gupta period onward, the emphasis was clearly on temple building. Except for remnants of brick structures and a ring-well made of thick and large terracotta rings unearthed at Noongola and built during the Gupta period, the other structures of the same period are a *sarvato-bhadra* type polygonal brick temple, a square-shaped brick temple with a flight of twenty-steps, two miniature brick shrines and basement of a votive *stupa* which were unearthed at Khana Mihirer Dhibi. The two furnaces found near the temple appear to have been used for burning shells in order to produce lime that was used as mortar and for moulding decorative stucco panels of the temples.

The emphasis on religious structures continued in the post-Gupta period, as evinced from the excavated remains of a small brick temple (5.94 m^2) and circular brick basements (possibly the remains of votive *stupas*) (IAR 1961-62: 63 and 1962-63: 47). The same is true of the Pala period when another huge brick-built temple (15.75 m x 29.58 m) was built. It is possible that the earliest phase of its construction dates from the 7th-8th centuries. The rest of constructional work from this period includes a few unidentified structures and renovation work (IAR 1957-58: 51-53 and 1967-68: 50).

The analysis presented above clearly indicates that Chandraketugarh had turned into a religious centre during the Gupta period. Indications from structural remains are further confirmed by coins unearthed from the site. In contrast to the continued circulation of a large number of coins from the Mauryan to the Kushana period, the money economy during the Gupta period appears to have declined as only a silver, a gold and a few cast copper coins have come down to us. Decline in circulation of money is a clear indication of decline in trade. This is further confirmed by the antiquities. As mentioned earlier, antiquities recovered from the Mauryan, Shunga and Kushana periods are Northern Black Polished Ware, Rouletted Ware, Stamped Ware, semiprecious stone beads including etched variety, glass beads, and seals and sealings with Kharoshti-Brahmi inscriptions. Antiquities from the Gupta period do not include Northern Black Polished Ware, Rouletted Ware and etched beads but we may discount these commodities because their use ceased after the Kushana period and hence they cease to function as indicators of trade during the Gupta period. What is striking is that Stamped Ware, semiprecious stone beads, glass beads, and seals and sealings with Kharoshti-Brahmi inscriptions from the Gupta era have not been found in South and Southeast Asian sites. This clearly shows that none of these commodities were exported from Chandraketugarh during the Gupta period. Hence, maritime trade at Gangê virtually ended with the beginning of the Gupta period. Therefore, we may reasonably conclude that the period of operation of the port of Gangê stretched from the 3rd century BCE to the early 4th century CE.

Gangê, cited in Roman accounts, was indeed located at Chandraketugarh. Like Tamralipti, Gangê was also an estuarine port with no permanent quays and wharves. The socio-economic environment of the port included production centres, commercial centres, residential quarters and an administrative centre. It was also linked with other South Asian and Southeast Asian land, riverine and maritime ports.

Chapter Four

Wari-Bateshwar: An Early Historic Maritime Exchange Centre

Located about 4 km southwest of Belabo town, Wari (24°05′46″ N & 90°49′42″ E) and Bateshwar (24°05′34″ N & 90°49′40″ E) are two adjacent villages in Amlabo union under Belabo upazila of Narsingdi district, Bangladesh (Fig. 4.1). While Tamralipti is profusely mentioned in the South Asian and Chinese literary sources but is absent in the Greco-Roman sources and whereas Gangê is mentioned in the Greco-Roman and Chinese sources but not in any South Asian literary sources; Wari-Bateshwar is completely absent in all literary sources. Nevertheless, this essay examines the physiographic and hydrographic features of the area in and around Wari-Bateshwar as well as the archaeological and numismatic evidence so far discovered in order to understand maritime activities in Wari-Bateshwar and then proceeds to ascertain the physical condition of the exchange centre at Wari-Bateshwar in the early historic period.

Physiography and Hydrography

Physiography and hydrography of the area in and around Wari-Bateshwar is particularly important for reconstructing its past. It is situated on an isolated bit of the Pleistocene terrace at Manohardi-Shibpur, which is detached from the Madhupur tract by the Old Brahmaputra

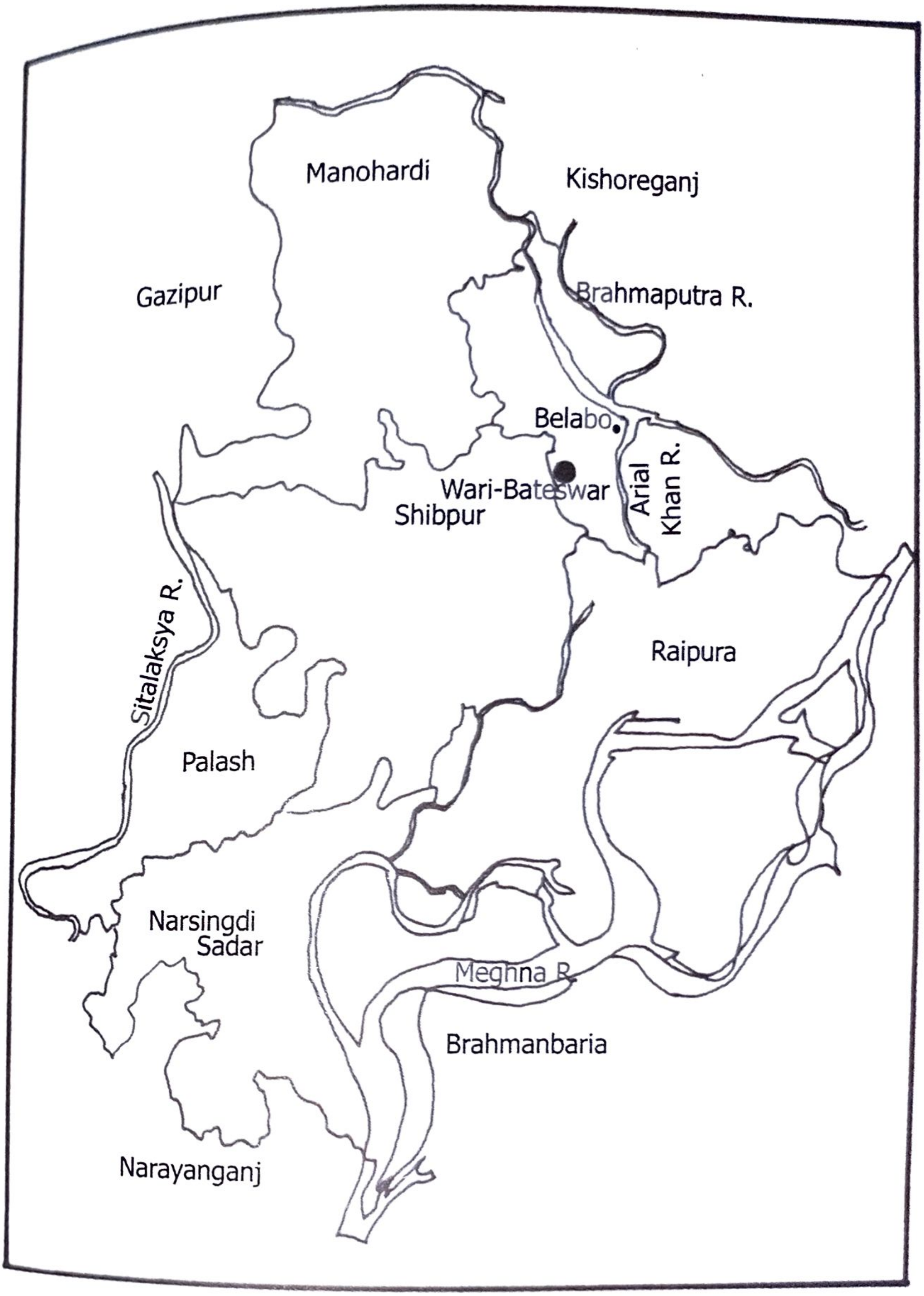

Manohardi
Kishoreganj
Gazipur
Brahmaputra R.
Belabo
Wari-Bateswar
Shibpur
Arial Khan R.
Sitalaksya R.
Raipura
Palash
Narsingdi Sadar
Meghna R.
Brahmanbaria
Narayanganj

Fig. 4.1: Location of Wari-Bateshwar in Belabo upazila, Narsingdi district, Bangladesh

Floodplain. Compact Pleistocene clay (which is red and pebble mixed, and in recent times has been referred to as Madhupur clay) is seen in most of the area. However, isolated tracts are also overlain by recent flood deposits of the late Holocene age. On the other hand, soil of the

Old Brahmaputra Floodplain is composed of sediments carried down by floodwaters. As one approaches the villages from Narsingdi, one cannot fail to notice mounds and high land separated by irregular belts of marshlands. This is because the landform of the region exhibits two major characteristics: (i) comparatively high convex slope gradient (known as *Chala*) and (ii) low valleys (known as *Baid*) (Rashid 1991: 22; Akanda *et al.* 2005: 76). The villages of Wari and Bateshwar stand on the *Chalas*. The course of the Old Brahmaputra River is only 4 km northeast, that of the Meghna is a few kilometres south and that of the Ariyal Khan River is about 3 km east from the villages. The confluence of the rivers Ariyal Khan and the Brahmaputra is 4 km northeast of Wari-Bateshwar. LandSat TM images and aerial photographs of Wari-Bateshwar show that there are three depressions in the *Baid* (Imran *et al.* 2002: 111). One of these is the Koira Khal (also known as Kaur) and it borders Wari in the north. The other two depressions are the Dangir Beel and the Chargachiya Beel. It is believed that these depressions were part of an earlier course of the Brahmaputra River. Shitalakshya, the other major river in the vicinity, flows some 20 km west of Wari-Bateshwar.

The environment described above immediately brings into relief three important physiographic features of the villages of Wari and Bateshwar. These are: (i) the villages are situated on a relative highland, which makes them inaccessible to flood-water, (ii) low-lying marshland exists in the immediate vicinity of the two villages and (iii) the Brahmaputra-Ariyal Khan confluence lies only 4 km away. These features are substantiated in a recent analysis of LandSat TM and RaderSat SN2 images. The results of the analysis indicates that the villages are located on a "high land, free from flood" where food and drinking water are available all the year round; favourable climate is a regular feature; the land is fertile and water manipulation system works favorably and the area is also a "strategically suitable location against intrusion" (Imran *et al.* 2002: 111).

Let us now remind ourselves that before the 17th century CE, the Brahmaputra River used to flow through Sherpur and Jamalpur, by the

Madhupur tract, intersect eastern part of the greater Dhaka district, and flow into the Meghna near Langalbandh and Sonargaon. After the 17th century CE, the river changed its course. Instead of flowing into the Meghna at Langalbandh and Sonargaon, it began to flow into the Meghna at Bhairab Bazar. This course is marked in Rennell's map of 1779 (Fig. 4.2). The Brahmaputra changed its course again in 1787 due to the earthquake of 1783 and began to flow through the Jamuna, which was till then a tributary. Consequently, Jamuna was transformed into the primary channel. On the other hand, the Brahmaputra was reduced to a subsidiary status and earned for itself the prefix "old", hence the name "Old Brahmaputra". If we allow ourselves the liberty of believing that in the beginning of the 1st millennium CE, the Brahmaputra possibly flowed along what today is known as the Ariyal Khan, then it becomes clear that the marshland, which lies in the vicinity of Wari-Bateshwar was probably a channel of ancient Brahmaputra (Jahan 1999: 210-212).

Furthermore, we need to remember that during the period between 7000 and 4000 years BP, the funnel shaped mouth of the Bay was

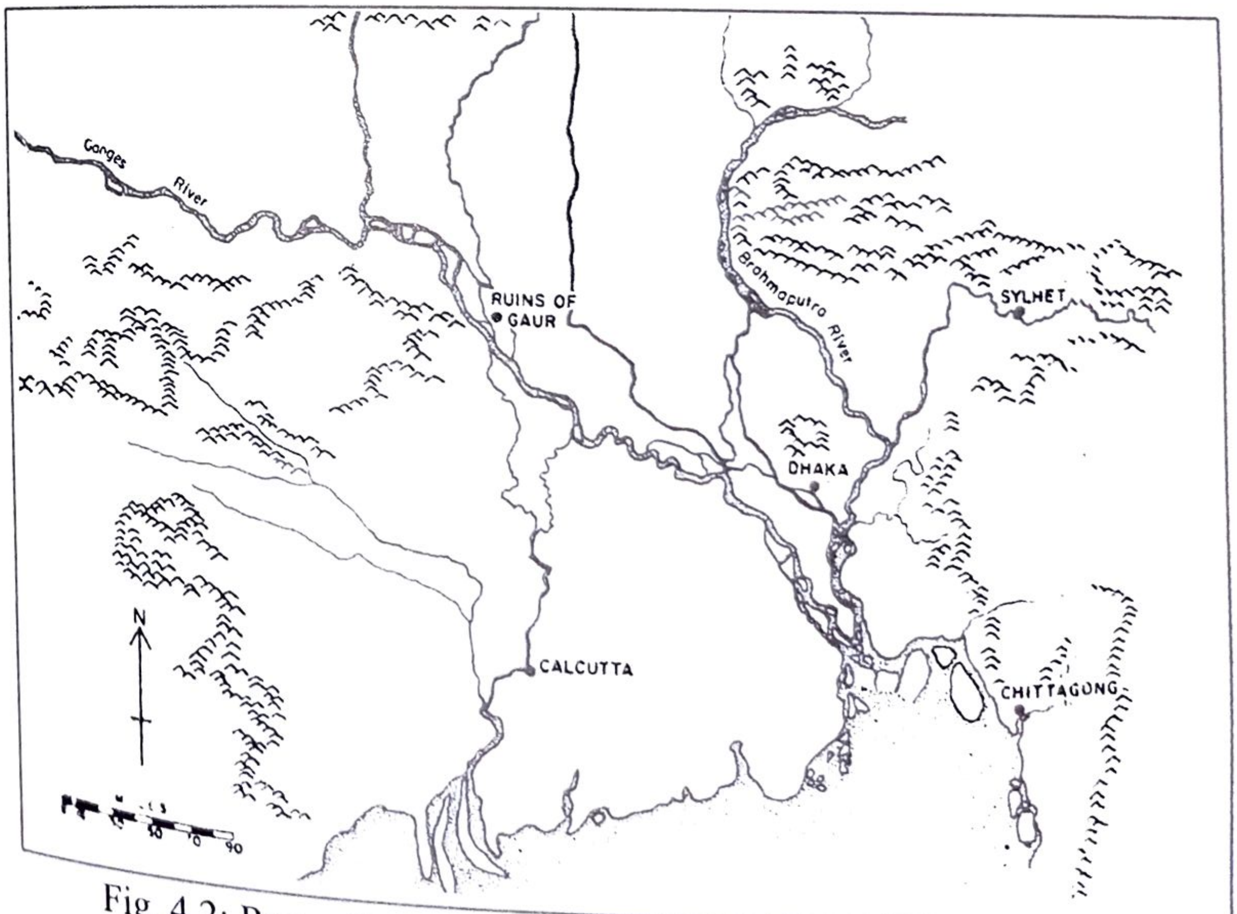


Fig. 4.2: Rennell's map of Bengal (1779 CE) after Eaton 1993

possibly much wider than today and Dhaka and the surrounding regions were then at the head of the Bay (Islam 2001: 142). Because Matuail (in the floodplain 3 km east of Dhaka city, located between the Balu-Lakshya River on the east and the Buriganga River on the southwest) was under marine influence until about 2,400 Years BP (c. 350 BCE), it can be reasonably assumed that the Bay was very close to the southern tip of Narayanganj district and the Brahmaputra would have fallen into the Bay at a point east of the tip. In such circumstances, the possibility of existence of a maritime port at Wari-Bateshwar in the early historic period is not beyond belief. Having thus set the site in its environmental backdrop, we may now proceed to an account of archaeological investigations conducted on it and the findings at Wari-Bateshwar to see if it adequately supports the above claim.

Genealogy of Scholastic Research

The earliest report on the site was published in 1933 in a weekly magazine named *Mohammadi*. Since then a large number of cultural materials from Wari-Bateshwar has been reported from surface collections and chance excavations (Pathan 1955; Pathan 1970, 1974, 1977, 1980 and 1989; Zakariah 1984; Karim 1991 and 1993; Khatun 1991 and 1994; Chakrabarti 1992 and 1996; Basa and Rahman 1998; Pawankar *et al.* 1998; Ahmed 2001; Rahman 2001; Rahman, Ahsan and Pathan 2003; Imam *et al.* 2002; Imam 2007; Rahman and Pathan 2013). I carried out an archaeological exploration at the site in 1998-99. The result of which has been presented at the third international congress on Bengal Art and subsequently published in the *Journal of Bengal Art* (Jahan 1999: 207-216). The findings of this paper aroused enough excitement and led to a number of excavations. In 2000, the International Centre for Study of Bengal Art (ICSBA), Dhaka carried out a small-scale trial excavation at the village of Wari (Haque *et al.* 2000: 283-315). Since then, S.M. Rahman (Department of Archaeology, Jahangirnagar University) is carrying out regular excavations at the site (Rahman and Pathan 2018: 467-488). Besides, the Department of Archaeology under the Ministry of Cultural Affairs, Government of the People's Republic of Bangladesh conducted excavations at

Wari-Bateshwar at first in four seasons from 2003-2006 and again another season in 2016-17 (Alam 2018: 489-496). I participated in the 2006 excavation season carried out by the Department of Archaeology under the Ministry of Cultural Affairs, Government of the People's Republic of Bangladesh. During this time the excavation was conducted at three neighbouring villages of Narsingdi district to understand the working relationship between people, environment and their technology in the early historic period. These are Wari (24°05′46″ N & 90°49′42″ E) and Bateshwar (24°05′34″ N & 90°49′40″ E) under Amlabo union in Belabo upazila and Sonarutala (24°05′28″ N and 90°49′18″ E) under Kamrabo union in Shibpur upazila (Jahan 2006: 25-29; 2010a: 135-146).

Cultural Materials of Wari-Bateshwar

The above-mentioned archaeological investigations revealed remnants of two fortified areas (henceforth referred to as outer and inner forts). Both the fortifications are gradually disappearing due to human and natural activities. The outer fort is located at Bateshwar

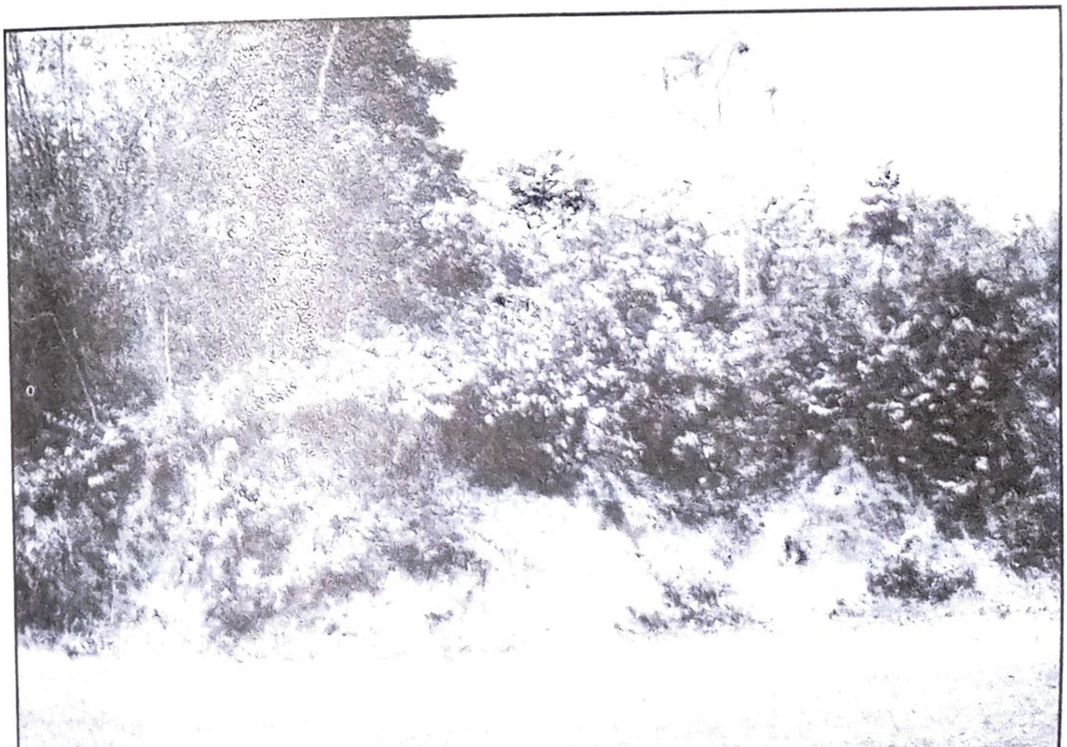


Fig. 4.3: Southern rampart of Asam Rajar Garh, Bateshwar.
Photo: Shahnaj Husne Jahan

and is locally known as Asam Rajar Garh (Fig. 4.3). At present it survives up to 4.87 m in height and the average breadth at the base is 35 m. According to the local inhabitants, an Assamese king and a Koch king took refuge here in the late 16th to the early 17th century CE and built the rampart as a defensive measure against militant incursion of both the Mughals and the Pathans. The outer fort encloses a large area with the help of two earthen ramparts built on the south and the west. Both the ramparts are surrounded by moats. The northern and the eastern sides of the outer fort are bounded by the Koira Khal and the river Ariyal Khan, respectively. The southern rampart of the outer fort is 3.5 km long and ends on the bank of the river Ariyal Khan. The Dangir Beel (138 m in breadth) and the Bara Baidyar Beel (42 m in breadth) intersect the rampart approximately 2 km and 3 km respectively from the southwest corner of the outer fort. The western rampart is about 1.7 km long and ends at the Koira Khal. The Chrgachiya Beel (130 m in breadth) intersects the rampart at about 1 km from the southwest corner of the outer fort. The remaining portion of the rampart runs into Sonarutala village (Jahan 2006: 26).

The inner fort is bounded by four earthen ramparts and it encircles the entire village of Wari. The northern and the southern ramparts measure 645 m and the eastern and the western ramparts measure 518 m. The average breadth at the base is 16.5 m. A canal or moat, 30 m in breadth, surrounds the fort on its exterior. It dries up during the dry seasons but has flowing water during the wet seasons (Jahan 2006: 26-27). In the north-western segment of the inner fort, laid bricks were found 08-09 cm below the surface covering an area 32 x 28.30 m in dimension during the excavation of 2006. Though no alignment could be ascertained, it is not unlikely that the excavated brick strata formed the lowest level of what was once a brick-built structure, which is lost today because of pilferage by local inhabitants. The sizes of the bricks vary between 41 x 22 x 3 cm and 44 x 21 x 4 cm. Similar bricks have also been found in a 6.5 x 5 m brick structure (reservoir?) unearthed at Wari during the excavations conducted by the Department of Archaeology, Ministry of Cultural Affairs, Government of the People's Republic of Bangladesh between 2003 and 2005 (Alam *et al.* 2004).

Some pieces of tiles have also been found during the 2006 excavation. Another brick structure measuring 10 m x 5.5 m with a brick paved floor has been discovered within the inner fort at Wari. The size of the bricks is 32 x 20 x 4.5 cm. Terracotta tiles found during excavation suggest that the roof of this structure was covered with such tiles. C^{14} dating of collected charcoal from the structure is 3rd century BCE (Rahman and Pathan 2018: 471).

Antiquities obtained so far from chance excavations as well as archaeological explorations and excavations in and around the site of Wari-Bateshwar till date are as follows: Neolithic celts, handaxes, shouldered axes, triangular axes, chisel, large knife, etc. made of sandstone, siltstone and fossil wood were found at Wari-Bateshwar under Belabo upazila in Narsingdi district (Pathan 1989: 12). Muhammad Habibullah Pathan has mentioned eight Neolithic celts. These are two triangular celts from Bateshwar, now preserved in the Bangladesh National Museum, Dhaka, three specimens of the pointed butt variety from Wari, one unspecified specimen from the Rajabari village under Raipur upazila, Narsingdi district, and two unspecified specimens from Bateshwar and Belabo (Chakrabarti 2001: 32). Besides, a quern with a pestle, a four-legged sandstone quern (36.57 cm x 22 cm) bearing three auspicious symbols (a *swastika* and two *nandipadas*) in relief and a ring stone are some major stone artifacts have been reported from the site.

Pottery found at the site consists of Red Ware (both coarse and fine), Grey Ware (both coarse and fine), Black and Red Ware, Red Slipped Ware, Painted Ware, Black Slipped Ware, Northern Black Polished Ware (Fig. 4.4), Rouletted Ware and earthen Knobbed Ware (Fig. 4.5).

A large number of semiprecious stone beads have been discovered from Wari-Bateshwar (Fig. 4.6). A close scrutiny of the beads revealed that they are mostly made of carnelian, agate, quartz, amethyst, crystal, chalcedony, chert and jasper. Their shapes are divergent and include globular, cylindrical, pentagonal, oval, trapezoid, rectangular, triangular, hexagonal, barrel, disc, spherical, crescent and diamond. Etched beads, a special type of agate and carnelian beads with a white design etched on their polished surfaces, have also been reported from the site in good numbers (Fig. 4.7). Although most of the semiprecious stone beads show one perforation, some show as many as four. The holes have been bored with remarkable skill, except in the cases of carnelian and agate, where the bores (made from both ends) fail to meet in a straight line. Along with these beads, a large quantity of cores, flakes and chips of semiprecious stone (Fig. 4.8) as well as imperforate and broken pieces of semi-precious stone beads (Fig. 4.9) has also been discovered from the site. Axe, double-axe, canine tooth, adze, triangular, crescent, duck, tortoise, triratna are some of the important shapes of the semiprecious stone amulets and pendants found at Wari-Bateshwar. The most interesting finding from Wari is a grey soft-stone amulet. It is rectangular in shape (with the four corners rounded off), measures 52 x 22 mm and has two holes on the two corners of the upper side. Motifs engraved within an oval frame in the center of the plaque provide some information regarding the religious aspects of the inhabitants of Wari-Bateshwar. The motifs depict a scene

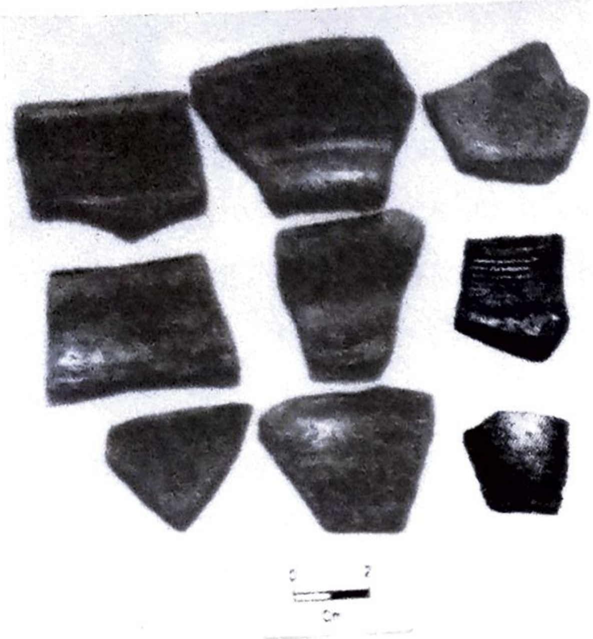


Fig. 4.4: Northern Black Polished Ware from Wari-Bateshwar. Photo: Shahnaj Husne Jahan

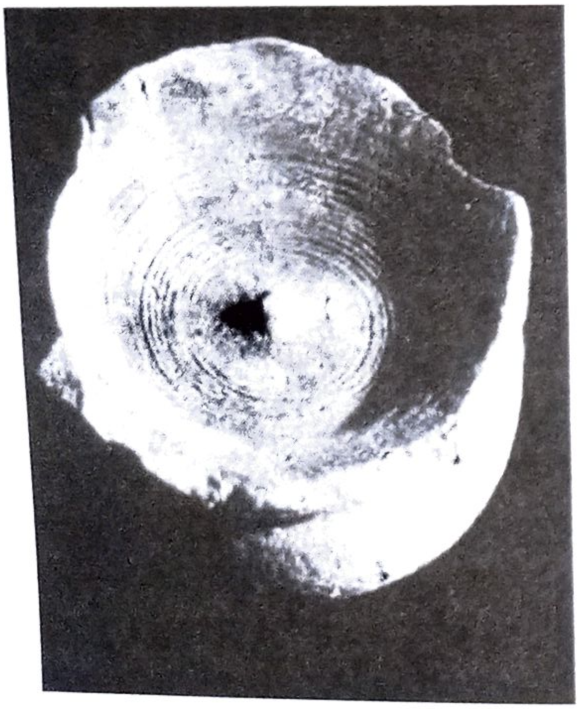


Fig. 4.5: Earthen Knobbed Ware from Wari-Bateshwar.
Courtesy: Sufi Mostafizur Rahman

where two devotees are offering obeisance to a deity. The deity is placed on the mouth of a pitcher and holds a sword in the right hand and a shield in the left. The deity has been identified as goddess or *ghatadevi* by Chakrabarti (1996: 77-80) and as a tribal war-god (?) by Imam *et al.* (2006: 1). It has been dated to the Mauryan period. Besides, cylindrical, disc and circular weights made of crystal, jasper, carnelian, granite and terracotta have also been discovered at Wari-Bateshwar (Rahman and Pathan 2018: 478).

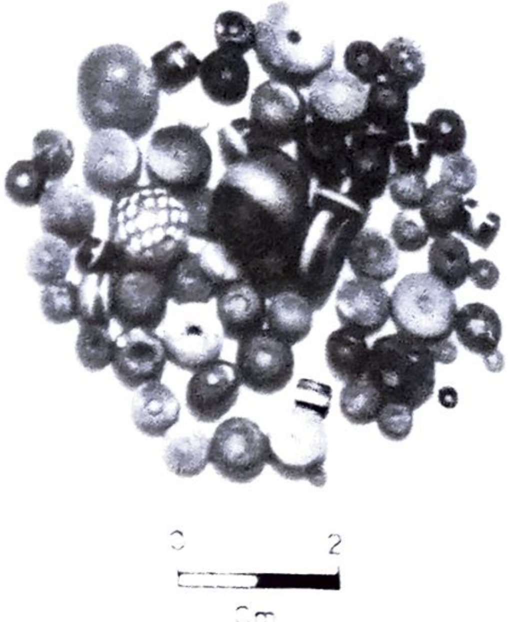


Fig. 4.6: Semiprecious stone beads from Wari-Bateshwar.
Photo: Shahnaj Husne Jahan

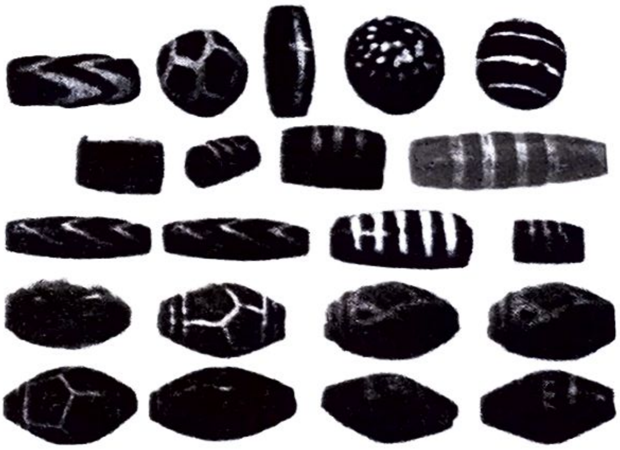


Fig. 4.7: Etched beads from Wari-Bateshwar.
Source: Daily Star, 2008

The most enthralling finding from a trench at Bateshwar excavated by the author in 2006 was a hoard (length: 125 cm, breadth: 58 cm and thickness: 53 cm) of 359 triangular iron objects (Fig. 4.10). The objects measure between 13.5 x 10 x 7 cm and 16.5 x 7.5 x 6 cm and their weight varies between 1.75 to 2.90 kg (Jahan 2006: 27). Commenting on similar objects found earlier from chance excavations at the site, Chakrabarti (1992: 58) suggests that these are “iron blooms which were imported to the site as raw material”. It is possible that these were the raw material for making axe-like iron objects. In addition, arrowheads, spearheads, nails and slags of iron have been reported from the site (Fig. 4.11). Apart from the cultural materials discussed above, terracotta beads, balls, and tiles, Indo-pacific glass beads, gold-foil glass beads, sandwich glass beads, copper bangles, a bronze armlet, fragments of high-tin bronze knobbed vessels (Fig. 4.12) have also been discovered at Wari-Bateshwar.

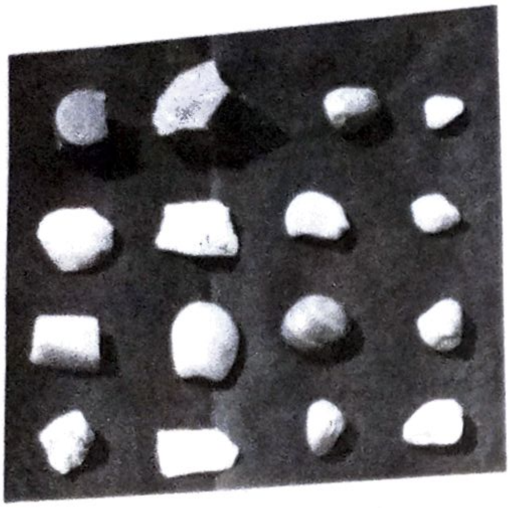


Fig. 4.8 : Raw materials for semiprecious stone beads from Wari-Bateshwar.
Photo: Shahnaj Husne Jahan

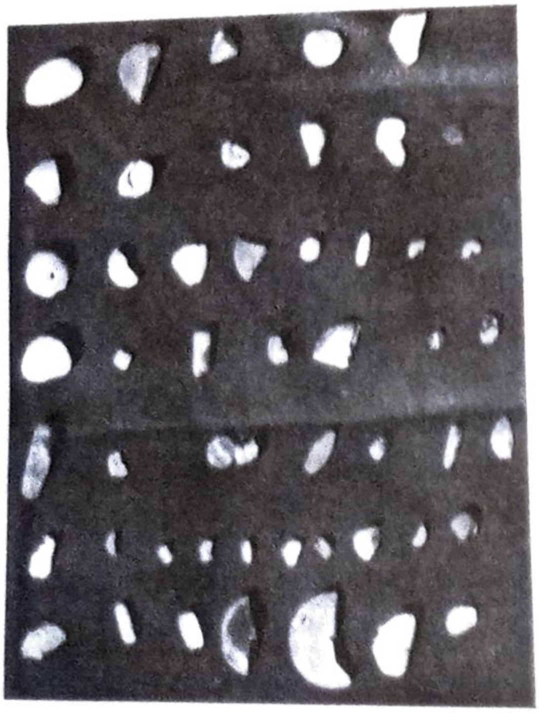


Fig. 4.9 : Broken pieces of semiprecious stone from Wari-Bateshwar.
Photo: Shahnaj Husne Jahan

Besides, a large number of silver punch-marked coins (Fig. 4.13) found at Wari, Bateshwar and in neighbouring villages such as Kandua, Marjal, Joshor, Kundarpara, Jaimangal, Chandipara, Patuli, Chula, Harisangan and Govasia. The coins are mostly circular, oval, rectangular and square in shape but a few are irregular. Various symbols such as sun, elephant, arrow, cow, tree, flower, deer, owl, lobster, boat, wheel, *'trishul'*, six-armed devices, mountain, mountain surmounted by a crescent, tortoise, fish, bird, etc.

Indicators of Maritime Trade

Of all the cultural materials discussed above, Northern Black Polished Ware (NBPW), Rouletted Ware, high-tin bronze knobbed vessels, earthen knobbed vessel, Indo-Pacific glass beads and semi-precious stone beads (specially the etched variety) deserve special attention (as in the case of Tamralipti and Gangê) for their commercial value. The distribution pattern of all these artifacts mentioned above proves beyond doubt that Wari-Bateshwar was already integrated in the Bay of Bengal littoral trade network between South Asia and Southeast Asia from the 3rd century BCE to the 3rd century CE (Jahan 1999: 207-216; 2002: 127-138; 2010a: 135-146; 2010b: 5-16; 2012:

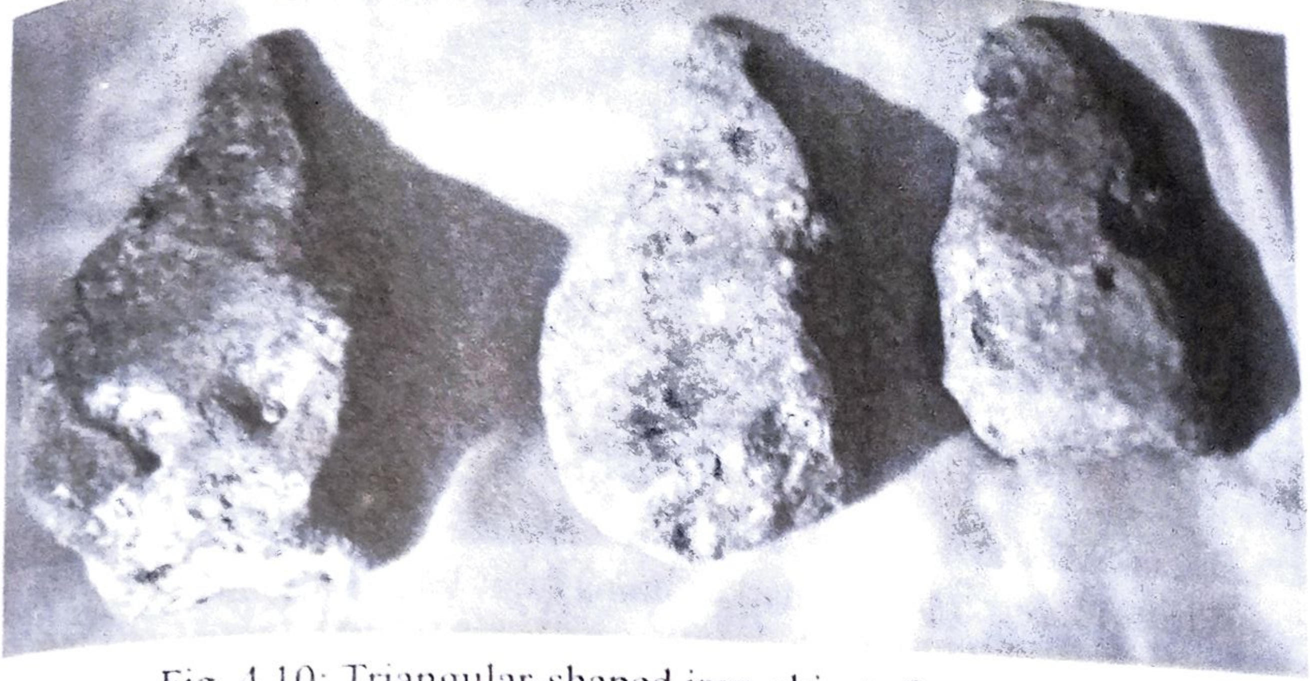


Fig. 4.10: Triangular-shaped iron objects from Bateshwar.
Photo: Shahnaj Husne Jahan

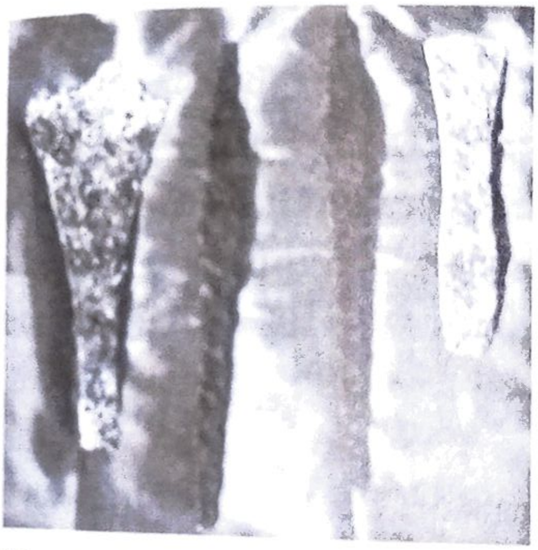


Fig. 4.11: Iron tools from Wari-Bateshwar.
Photo: Shahnaj Husne Jahan

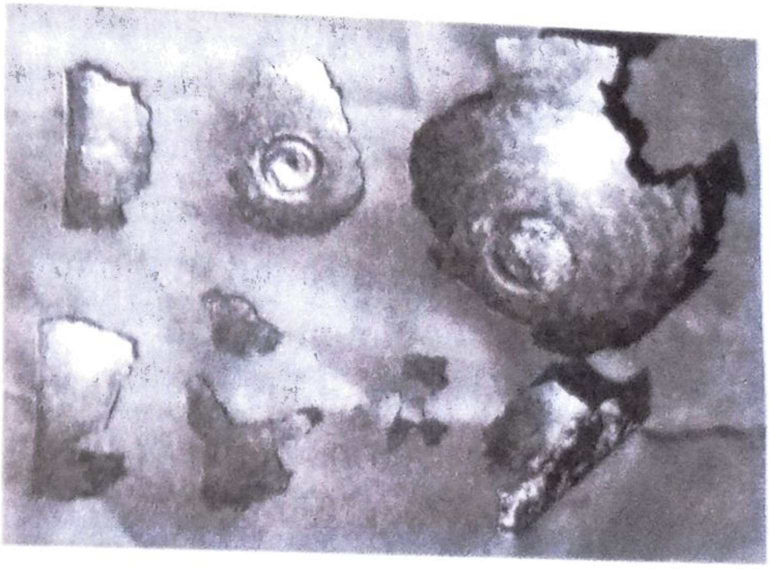


Fig. 4.12: Fragments of high-tin bronze knobbed vessels from Wari-Bateshwar.
Photo: Shahnaj Husne Jahan

205-228 and 2016: 304-310; Basa and Rahman 1998: 291-298; Glover and Jahan 2014: 90-97). Thus archaeological evidence added with physiographic evidence clearly prove that Wari-Bateshwar was indeed an important maritime exchange centre or port.

A large number of silver punch-marked coins found at Wari, Bateshwar and in neighbouring villages serve as corroborative evidence to substantiate Wari-Bateshwar's claim as a maritime port. The claim is all the more valid because the number of Wari-Bateshwar

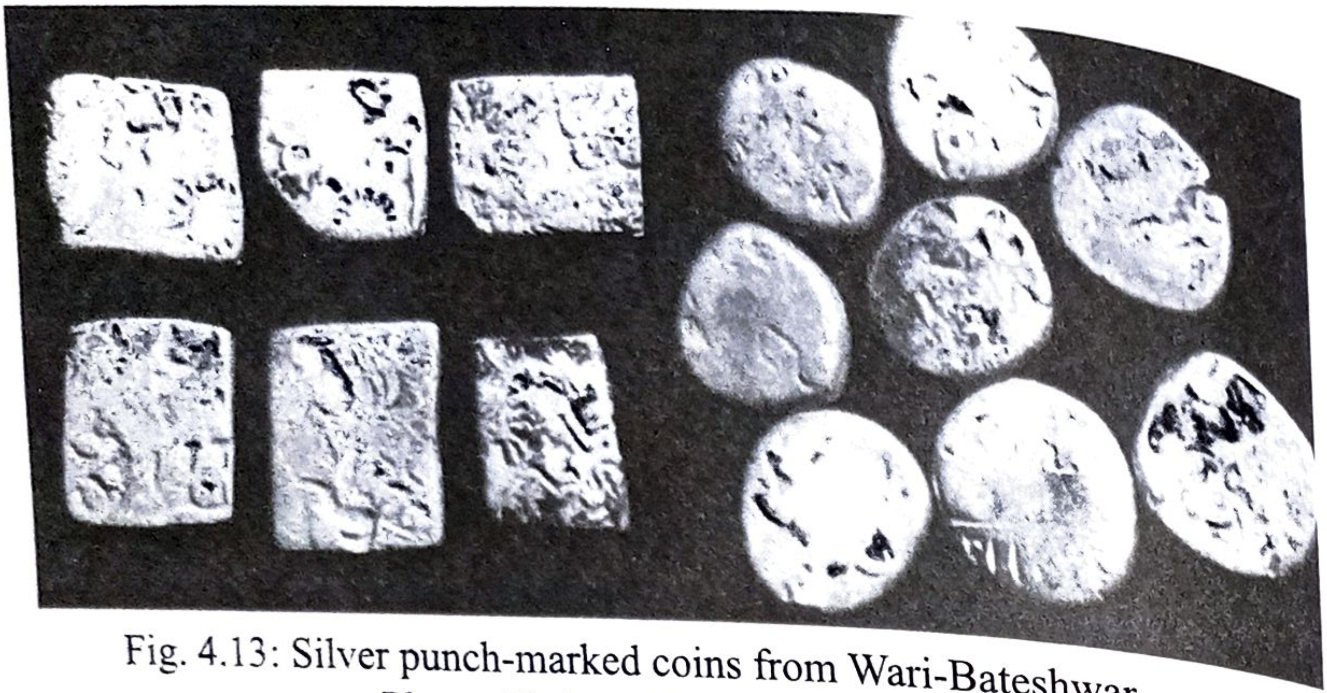


Fig. 4.13: Silver punch-marked coins from Wari-Bateshwar. Photo: Shahnaj Husne Jahan

punch-marked coins (amounting to a few thousand) is far greater than that obtained from other areas in Bangladesh which have also yielded similar coins (i.e., Bogura, Rajshahi and Mymensingh) (Karim 1993: 5). It is also significant that most of these coins (found from 1933 to 1999) were discovered in earthen containers, at six spots at Wari, all of which are located on the margins of marshlands. Only one coin is reported to have been found in the interior parts (in this case, Bateshwar) (personal communication with Muhammad Habibullah Pathan on 14 February 1999 at his residence). Various symbols such as boat, fish and lobster seen on some of these coins, cannot escape attention because they too signify maritime connection. The presence of such a large number of coins found in hoards on the margins of marshlands (which, as observed above, was a former channel of the Brahmaputra) further substantiate Wari-Bateshwar as a port frequented by maritime merchants. The presence of silver punch-marked coins not only indicates that the inhabitants used money-economy but also suggest that they possessed considerable purchasing capacity. Unlike Tamralipti and Gangê, we have no literary evidence to show that commodities and people were transported to and/or from the port. However, archaeological evidence cited above bears ample testimony as to which commodities were transported to and from Wari-Bateshwar.

Nevertheless, according to the *Periplus*, the materials exported from Ganges (i.e., Vanga) were malabathrum, Gangetic spikenard, pearls, and very fine quality Muslin (Schoff 1912: 47-48). Preliminary ethno-archaeological study of greater Dhaka district reveals that pink pearls are still obtained from the rivers of the district (specially Burigganga) and Muslin is still manufactured in the same district (Demra and Sonargaon) and in the neighbouring district of Kishoreganj (Bajitpur). Moreover, the region of Narsingdi is still famous as a weaving centre. Furthermore, Wari-Bateshwar, till recently, was the abode of quite a few weavers. Therefore, it can be reasonably assumed that pink pearls and Muslin were the products, which could have been procured from Wari-Bateshwar. On the other hand, malabathrum and Gangetic spikenard are obtainable from the Himalayan region. Now consider the fact that the Himalayan region is not far from Wari-Bateshwar. Consider also the fact that there existed land routes from Kamrupa to Tibet (used by Buddhist monks and Tibetan emissaries) and from north Bengal, via Sikkim and Bhutan to Tibet (Mukhopadhyaya 1983: 30). Thus, there can hardly remain any objection to the hypothesis that Wari-Bateshwar served as a maritime port for exporting Gangetic spikenard and malabathrum as well.

Physical Condition of the Port

The location of Wari-Bateshwar on the bank of an ancient course of the Brahmaputra can only mean that it was an estuarine port. As discussed above, Wari, the inner fort, is situated on the south bank of the Koira; we may believe that the harbour was concentrated in this area. However, like Tamralipti and Gangê, discussed in the previous two chapters, no man-made installations have been unearthed on the margins of the marshland and hence we may believe that no jetties were constructed at the harbour. The port site was possibly made up of a few public utilities, warehouses and production centres for manufacturing semi-precious stone beads. The existence of the latter is indicated by the discovery of a large quantity of core and waste materials (such as semi-precious stone blocks, flakes, chips, imperforated and broken pieces of semi-precious stone beads) mentioned earlier. Obviously the semi-precious stones were not quarried at the site or anywhere in its vicinity because no such stone quarry exists in Bangladesh. Hence the only possible explanation could be that the raw materials for the beads were imported, possibly by land route or riverine route, from the Himalayan region and other parts of India. Discovery of the hoards of triangular-shaped iron blooms or implements and various types of iron tools such as arrowheads, spearheads and nails indicate the existence of production centres geared at manufacturing various types of iron implements. Innumerable potsherds seen scattered on the surface of the two villages and the discovery of various types of pottery including Northern Black Polished Ware, Rouletted Ware, earthen knobbed ware may be taken to indicate the presence of production centres for manufacturing pottery.

Structural remains of mud ramparts and moats at Wari and Bateshwar indicate that the site was fortified. One may even suggest that the fortification is a sign that Wari-Bateshwar was an administrative center like Chandraketugarh.

In 2004, Rahman exposed a 50 m long area of a structural remains within the inner fort. According to him, it is a part of a 180 m x 6 m *lime-surkhi* road. In the following year, he exposed 31 m x 2.1 m area leading perpendicularly away from the above-mentioned 180 m long area and he identified his new finding as a by-lane (Rahman and Pathan 2013: 45). During the 2006 excavation season of the Department of Archaeology, Government of the People's Republic of Bangladesh, four trenches were taken in the west, north-west and the south of the above-mentioned 180 m long area to understand its nature. I have recorded two overlying compacted areas made of brick grits (both 10 cm in thickness) in all four trenches, the upper level of which appears to be connected to the above-mentioned 180 m long area. Indications received from all investigations conducted so far suggest that Rahman's reading of the compacted area as a road and a by-lane is misleading. It is possible that the area was a public space in the form of an open-air floor that extended over a large area of the south-eastern part of the inner fort. The upper level may have been necessary when the initial (lower) level had weathered away. Potsherds and beads found on the upper floor suggest that the open-air public space may even have functioned as an exchange center similar to *hats* seen in rural Bangladesh even today.

Period of Operation

The cultural materials indicative of maritime trade such as Northern Black Polished Ware (NBPW), Rouletted Ware, semi-precious stone beads (specially the etched variety), glass beads, knobbed vessels (earthen and high-tin bronze) and punch-marked coins found at Wari-Bateshwar are roughly dated between the 3rd century BCE and the 3rd century CE. Hence, we may believe that the port's life span fell within the same period.

No indication is available which may determine the cause of the decline of Wari-Bateshwar as a port. One may nevertheless tentatively suggest that one of the reasons was the change of the course of the Brahmaputra. Because of the fall, some other site/s in the neighbourhood must have taken up the role of Wari-Bateshwar. In support of this argument we may remind ourselves that in c. 643 CE, Bhaskaravarman offered Xuanzang official attendants to accompany him should he desire to return to China by the Southern Sea route (i.e., by way of Java or Sumatra) (*Life*, Book V; Beal 1973: 188; Baruah 1985: 75). The Nidhanpur copperplate inscription of Bhaskaravarman (Gupta 1967: 32-40) issued from Karnasuvarna renewing an earlier grant of revenue-free land in Chandrapura *visaya* (in the southern part of present Sylhet district as the Paschimabhaga copperplate land grant of Srichandra proves; Gupta 1967: 116-117), clearly show that the entire tract of land from Murshidabad (where Karnasuvarna was located) to Sylhet, including the entire downstream course of the Brahmaputra was within his domain. Hence, one may reasonably assume that Bhaskaravarman was referring to a port on the estuary of the Brahmaputra, which replaced Wari-Bateshwar. The assumption is reasonable given the fact that the two copperplates of Devakhadga issued in c. 665 CE and found at Ashrafpur, a village under Shibpur upazila (Laskar 1907: 85-91) indicate settlement at the area. A bronze votive *stupa* and remains of old bricks and fragmentary walls testifying the existence of a ruined Buddhist monastery at Ashrafpur (Zakariah 1984: 414); a 8th century CE temple at Dhupirtek in Joynagar union and a Buddhist monastery of the 5th century CE at Jankhartek in Josar union discovered by Rahman and Pathan (2018: 471-472) are further indications that a prosperous urban centre capable of patronizing a Buddhist monastery flourished in this area. As we will see later in this volume, Sonargaon, hardly 35 km to the southwest of Wari-Bateshwar, served as a port from the early 14th century CE and it was at this port that Ibn Battuta boarded a junk bound for Java. This strengthens the belief that in the intervening period between the fall of Wari-Bateshwar and the rise of Sonargaon there must have been one or more ports in the vicinity of these two sites.

The physiographic and archaeological findings presented above make it clear that Wari-Bateshwar was an estuarine port with no permanent quays and wharves. The socio-economic environment of the port included production centres, commercial centres as well as an administrative centre. It was well connected with other South Asian and Southeast Asian exchange centres and operated from the 3rd century BCE to the 3rd century CE.

Chapter Five

Kotalipara: A Centre of Maritime Trade and Commerce

The earthen ramparts of Kotalipara (another spelling Kotalipada) are still an unresolved puzzle in the history of Bengal (Fig. 5.1). Bhattasali (1925-26: 86) has identified it as Chandravarmakota (lit. "Chandravarman's fort") mentioned in Samacharadeva's Ghugrahati Copperplate (lines 18-20, Bhattasali 1925-26: 79). He calls it "the biggest ancient earthwork known in Bengal", larger than even the fortified site of Mahasthangarh in Bogura district, Bangladesh, which is 0.91 km (1,000 yards) by 1.37 km (1,500 yards) (Fig. 5.2). Raychaudhuri (1943: 30) notes the dominant but as-yet-unproven hypothesis that the fort was founded by Chandravarman, cited in the Susunia Rock Inscription and the Allahabad Prashasti; both the inscriptions are dated to the 4th century CE. He also argues "the marshy area called Kotalipada (…) was once a thriving seat of civilisation and possibly a centre of sea-borne trade and commerce" (Raychaudhuri 1943: 7). Haroun er Rashid (1991: 130), offering a slightly deviant proposition, identifies Kotalipara or Gaurnadi (situated about 24 km east of Kotalipara) as the probable site for Tilogramon, the town that Ptolemy locates between the two mouths of Ganga (Kamberikhon and Pseudostomon in Bengal during the 2nd century CE. Nevertheless, no acceptable resolution of the puzzle has yet been found.

Fig. 5.1: Kotalipara, Gopalganj district, Bangladesh, Courtesy: Department of Archaeology, Government of the People's Republic of Bangladesh

The resolution of the puzzle of Kotalipara continues to elude scholars not only because all known literary sources are completely silent about it, but also because no scientific excavation has yet been undertaken at the site. This essay examines epigraphic, numismatic, physiographic and geomorphologic evidence to resolve the puzzle and proposes that Kotalipara was the site of a maritime port that functioned prior to the mid-8th century CE.

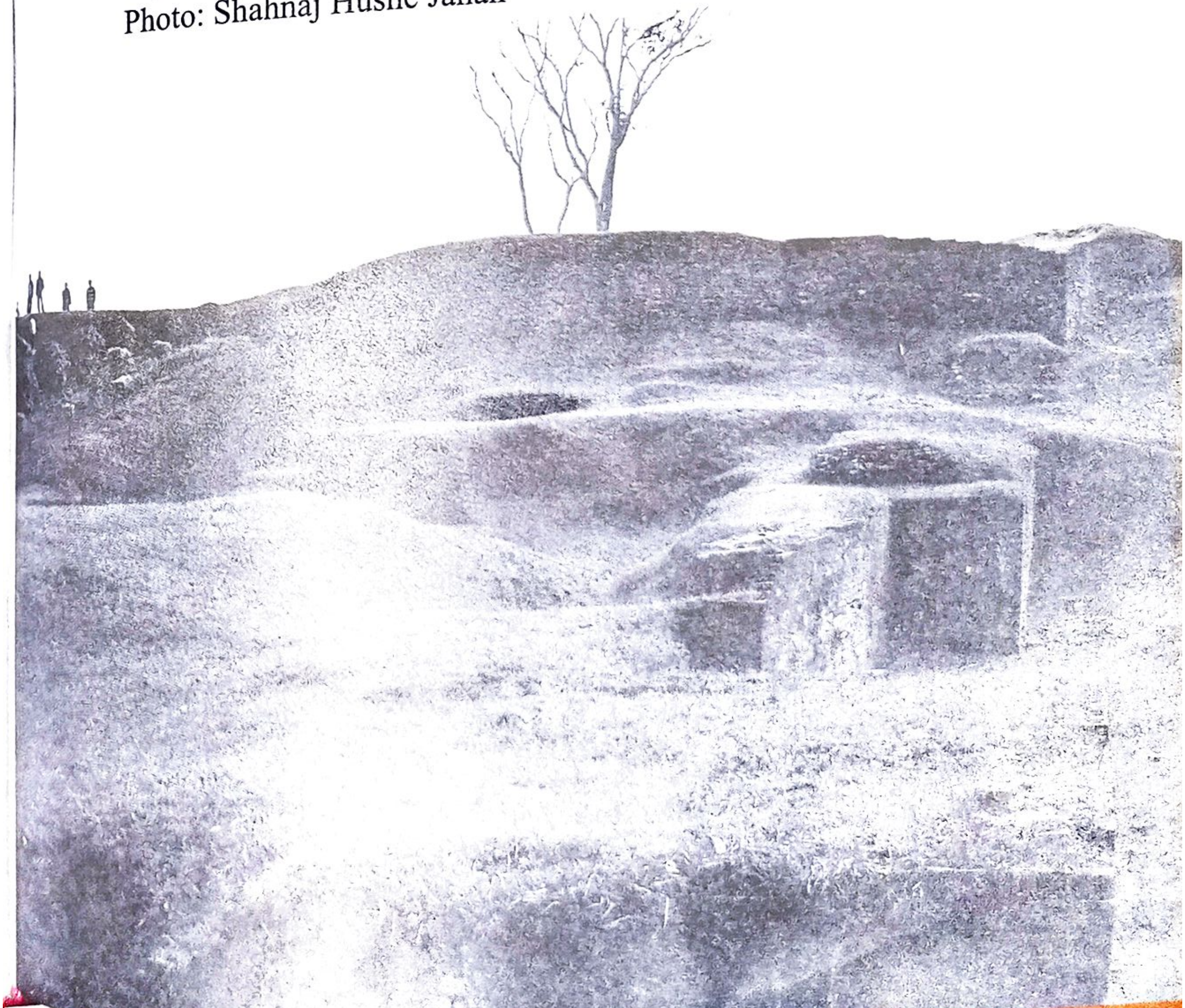
Geographical Location and Remains

Kotalipara (22.9833° N 89.991°E) is a small upazila town of Gopalganj district in Dhaka division, Bangladesh and situated 18.5 km to the east of the present Gopalganj district headquarters. A distributary of the Madhumati River, called the Ghaghar, runs 1 km west of the town. Today, the area around Kotalipara is largely lowland, partly water-logged, from which linear strips of highland jut out. The strips of the highland on each side are approximately 4 km long. At present the maximum height of these strips is 6 m and the spread at the base is

60 m. The western strip appears broken at the centre. On top of the southern part of the same (i.e., western) strip stands the infrastructure of the local administration. Outside the four strips, there still remain disjointed sections of canals (60 m wide and 2.2 m maximum deep), separated from each other by patches reclaimed by local inhabitants for rice cultivation. However, the canals outside the northern and the western strips still stand out prominently (Jahan 2003). The area enclosed by the strips is lowland; particularly the northern portion where rice is cultivated, but the southern portion is comparatively higher and is dotted with signs of human habitation.

According to O'Malley's (1925: 16) report prepared three-quarters of a century ago, the ruins of Kotalipara "was a great fort with mud-walls ... which must have been one of the wonders of India when it was constructed". He further noted that the mud-walls were 4.57 m to 9.14 m (15 to 30 feet) high and enclosed an area about 10 km^2 (four square miles). On careful study of the present site of Kotalipara, one can still

Fig. 5.2 : Mahasthangarh in Bogura district, Bangladesh
Photo: Shahnaj Husne Jahan



discern the highland area of the four strips forming four arms of a square. There can be little doubt that these arms were the earthen ramparts of a fortified city. The centre of the western arm, which appears broken today, was possibly the entrance to the ancient fortified city. The canals were once interconnected and formed the outer moat of the fortification. There was another moat inside the rampart, traces of which can still be made out although it has almost dried up.

According to Bhattasali's (1925-26: 85) writing, "brick constructions very often come up unexpectedly from low water-logged places". The researcher herself could locate very few indications of archaeological remains during her field visit to the site. Numerous human habitations sprawl all over the four ramparts of the ancient city. At some places, in some homestead compounds, brick structures were located immediately below the present soil level. However, those possibly date to the 17th/18th century CE. Since the entire area is waterlogged, the water level beneath the surface is quite high. Thus, it is not possible to investigate much from the top of the ramparts. Nevertheless, existing remains of the earthen walls and O'Malley's report leave no doubt that the jutting out strips of highland at Kotalipara are indeed ruins of an ancient fortified city. As the physiographic features and geomorphological studies discussed below show, Kotalipara was very much a feasible site for an estuarine port towards the end of the early historic period.

Locational Feasibility of Kotalipara as a Maritime Port

Kotalipara is situated on the south-eastern end of the Central Delta Basin (also known as Faridpur Beel), which is an extensive area (1931 km^2) of swamps. These swamps lie to the north and south-east of Gopalganj town and to the east of Madhumati River. Its distance from Gopalganj is 29 km by road, located south-south-east of the town. Furthermore, it is less than 25 km east of the point where the Madhumati River parts from the Khulna-Atrai. Because the river is intimately linked with the fate of Kotalipara, it is necessary to examine the entire course of the river.

The Madhumati originates as the Garai which issues from the Ganga a few kilometers north of Kushtia town. Kaliganga branches off from it south of Kushtia town and joins the Kumar south of Shailakupa town in Jhenaidah district. The mainstream of the Garai meanders through Rajbari district to join the Kumar in the northern border of Magura-Faridpur districts. From there it changes its name to Madhumati and flows in a south-easterly direction through the bordering region of Faridpur-Magura districts and then in a south-south-easterly direction through the bordering region of Faridpur-Narail districts. A branch of the Chitra joins it when it reaches Gopalganj-Narail border. As it continues its journey in a south-south-easterly direction, a stream called the Nabaganga takes off from it in a south-westerly direction to join the Chitra. When the Madhumati reaches the northern-most tip of Bagerhat, the Atharobaki takes off from it in the south-westerly direction, later to join the Chitra. The Madhumati continues through the border of Bagerhat-Gopalganj districts in a south-south-westerly direction (where it is also called the Kaliganga) but changes to a southerly direction when it meanders through the border of Bagerhat and Pirojpur districts. Few kilometers south of Pirojpur town, the Kocha River joins it on its left bank and it changes its name to the Balaswar. Further south, the Balaswar is joined by the Ghasiyakhali River on its right bank. From the Bogi forest outpost of the Sundarbans, the river changes its name again to Haringhata (the 'Deer Ford'). Earlier, the Haringhata was larger than the Marjal and second only to the Meghna, but diversion of the Garai through the Nabaganga has reduced the stature of the Haringhata (Rashid 1991: 60).

When we compare the above course with Ptolemy's map

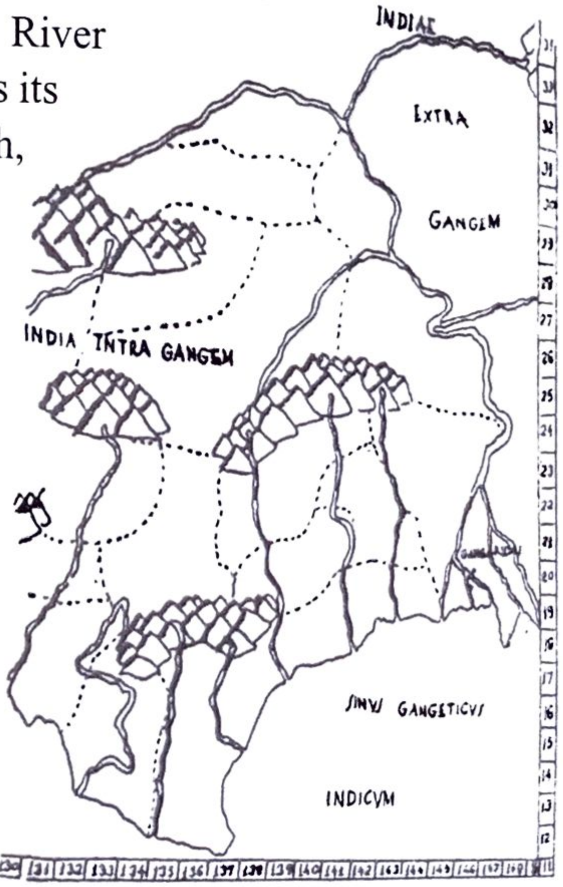


Fig. 5.3 : Map of Intra Gangem from Claudius Ptolemaeus after Majumdar 1943

of the Ganga, even after acknowledging inaccuracies, we are able to come closer to reconstructing historical geography of the Kotalipara-adjacent area. Ptolemy's Ganga, it is well known, empties in the Bay of Bengal through five mouths (Fig. 5.3). Three of these (the Kambyson, the Mega and the Kamberikhon) clearly originate from the Bhagirathi branch in the west. Its eastern branch, the Padma, has two mouths: the Pseudostomon and the Antibole. Comparing Ptolemy's map with the course of the Kumar-Madhumati-Haringhata, one is left with little doubt, as Ray (1993: 82) suggests, that it is none other than Kamberikhon. Between the Kamberikhon and the Pseudostomon, Ptolemy shows an isthmus and at its head and on the seacoast, a town called Tilogramon.

The Madhumati is only 22 km west of Kotalipara today. If we are prepared to accept that the Ghaghar was one of the distributaries of the Madhumati (the other distributary being the Kaliganga), then we may easily place Kotalipara on the bank of one of the major outlets of the eastern course of the Ganga. It is even possible that the Ghaghar was an earlier channel of the Madhumati before changing course to Kaliganga. In the 2nd century CE, Kotalipara lay not only on the bank of one of the major outlets of the Ganga; it actually lay near the coast of the Bay of Bengal as the following study on coast-line changes shows.

Reconstructing the shoreline Islam (2001: 138-139) shows that during the early mid-Holocene period (7,000 to 4,000 years BP), the shoreline of the Bengal Delta (from the Sundarban region to the Padma-Meghna course) was further landward and has been moving uniformly in a southeast direction (Fig. 5.4). The site of Khulna City was then under the sea and possibly the coastline was very close to Jessore and Narail. The northern limit of the present day Sundarbans was established (with some local variation) at c. 3000 years BP and the sea finally retreated from the Khulna region at about 1800 years BP (Islam 2001: 144). It follows quite logically that the sea had retreated from the area around Kotalipara (which lies immediately to the east of Khulna region) around the same time, i.e., 200 CE.

As geomorphic evidence shows, the swamp that we see today around Kotalipara was created even later. According to Khan (1991: 18), the Central Delta Basin was formed "due to changing stream courses at short intervals and rapid building up of high levees by the streams". On the other hand, Morgan and McIntire (1959) have hypothesized that "part of the delta is subsiding as compensation to the elevation of the Tippera Surface and the Barind Tract". Rashid (1991: 30) supports the above hypothesis and adds that "absence of rapid deposition by the active distributaries (which flow towards its east)" gave rise to the basin. Strickland (1940) has proposed a third opinion. He shows that the rise of tide water in once-active rivers (which reached a maximum height of 6 m) led to rapid deposition of silt on the southern side of the basin. The formation of this seaward ledge went along with compaction of the deposit, which led to depression of the area to its north. The ledge prevented inland deposition. The compound result of these factors gave rise to the basin. It is not within the scope of this study to ascertain which of the three opinions (i.e., changing stream courses, subsiding of the delta and action of tide water along with formation of this seaward ledge), is actually the cause of the formation of the swamps. However, what is clear is that the formation of the swamps is a later phenomenon.

Summing up our findings from physiographic features and geomorphological studies, we may say that in circa 2nd century CE, Kotalipara was near the coast of the Bay of Bengal; on the bank of one of the major outlets of the Ganga and that the marshes were created much later. These factors make Kotalipara a feasible site for an estuarine port, very much like all other maritime ports in Bengal. Since the location of the site closely matches Ptolemy's Tilogramon, it is not unlikely that the port-town at Kotalipara was the same as the Roman geographer refers to. Epigraphic findings discussed below clearly show that in the 6th century CE, Kotalipara was not only a port but also an administrative centre.

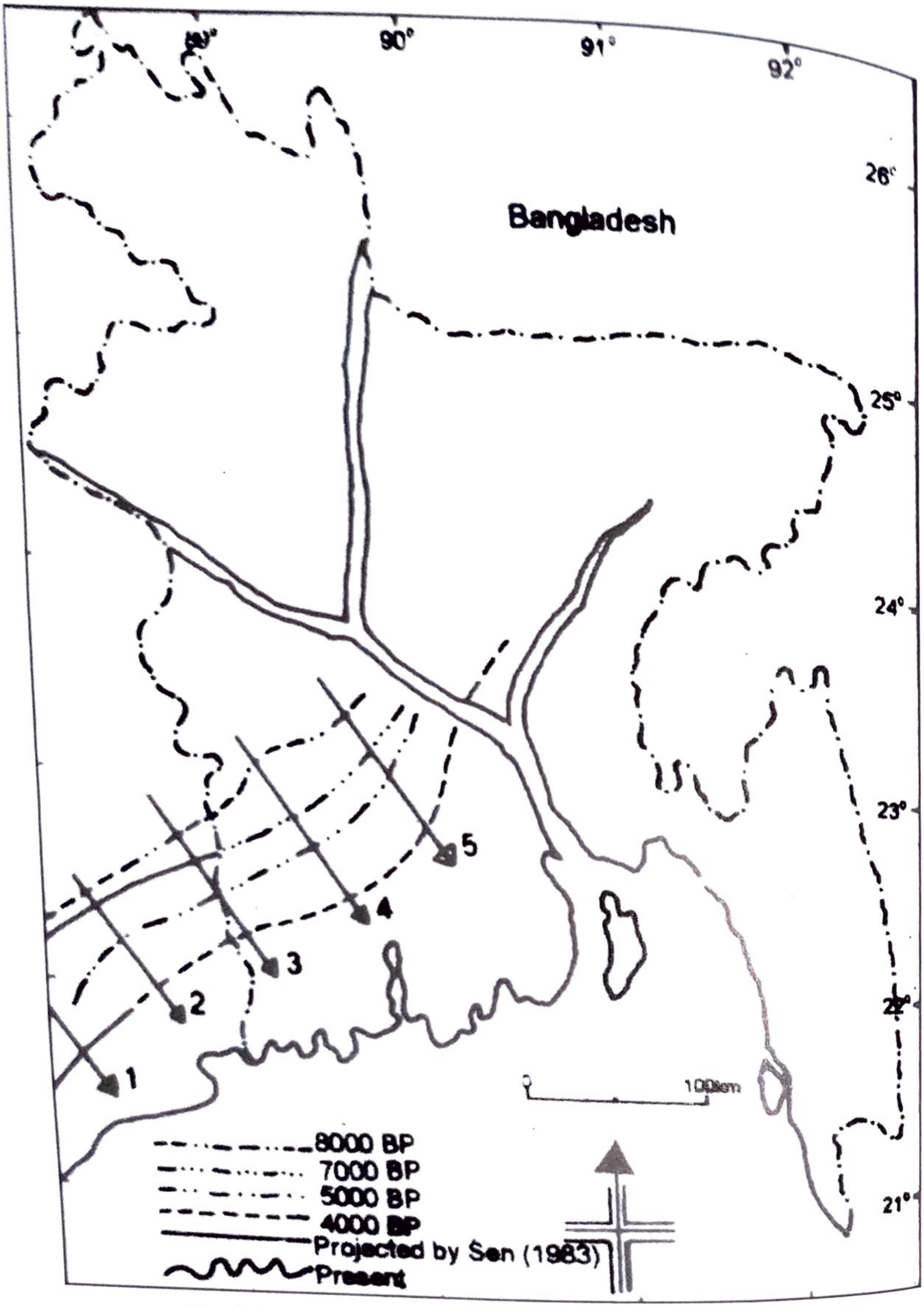

89°
90°
91°
92°
26°
Bangladesh
25°
24°
23°
22°
21°
1
2
3
4
5
0
100km
8000 BP
7000 BP
5000 BP
4000 BP
Projected by Sen (1983)
Present

Fig. 5.4 : Approximate Holocene shoreline after Islam 2001

Kotalipara in the Sixth Century

Eight copperplates listed below, which were issued in the second and third quarters of the 6th century CE by three monarchs (who were contemporaries of the Imperial Guptas who ruled over north Bengal), may help us decipher the puzzle of the fortified city at Kotalipara. The monarchs, whose relationship among themselves has not been ascertained, were Gopachandra (c. 525-540 CE), Dharmaditya (c. 540-560 CE) and Samacharadeva (c. 560 CE).

1. Jayaramapura Copperplate Inscription of the time of Gopachandra (Regnal Year 1); find-spot: Baleshwar, Orissa, India (Rajaguru 1963: 206).

2. Mallasarul Copperplate Inscription (of Vijayasena) of the time of Gopachandra (Regnal Year 3); find-spot: Bardhaman district, West Bengal, India (Mukherji and Maity 1967: 87-95). Majumdar (1935-36: 158-159) has identified the places named in the copperplate which shows that the land granted lay along the north bank of the Damodar River, west of the city of Bardhaman, West Bengal, India.

3. Faridpur Copperplate Inscription of the time of Gopachandra (Regnal Year 18); find-spot: greater Faridpur. Land that was granted belonged to the Varakamandala vishaya (Mukherji and Maity 1967: 83-87).

4. Faridpur Copperplate Inscription of the time of Dharmaditya (Regnal Year 3); find-spot: greater Faridpur, Bangladesh. (Cited henceforth as Faridpur Copperplate 1 of Dharmaditya). The board of administration of Varakamandala vishaya issued the seal. The land granted was also in the same vishaya (Mukherji and Maity 1967: 74-79).

5. Faridpur Copperplate Inscription of the time of Dharmaditya; find-spot: greater Faridpur, Bangladesh in 1892 (cited henceforth as Faridpur Copperplate 2 of Dharmaditya). Land that was granted belonged to the Varakamandala vishaya (Mukherji and Maity 1967: 79-83).

6. Kurpala Copperplate Inscription of the time of Samacharadeva (Regnal Year 7); find-spot: Kurupala village, situated in between Kotalipara and Ghugrahati village in greater Faridpur (Sen 1942: xvi). The inscription has not been deciphered as yet.

7. Ghugrahati Copperplate Inscription of the time of Samacharadeva (Regnal Year 14); find-spot: Ghugrahati, 3.22 or 4.83 km (two or three miles) from Kotalipara in c. 1907. The land transferred in the copperplate lay on the east of a corner of Chandravarman's fortified city (identified with the fortified city at Kotalipara) and south of the village Gopendrachoraka (identified with modern Govindapur village near Kotalipara) (Bhattasali 1925-26: 86).

8. Kotalipada Copperplate Inscription of the time of Dvadasaditya; find-spot: Ramasil-Pirervadi, Kotalipara, Gopalganj; now preserved in the Bangladesh National Museum, accession no. 80.513 (Islam 2011: 71-82).

In addition to the above, an undated seal from Nalanda issued during the rule of Samacharadeva, has also been discovered. The inscription on the seal has not been deciphered and details of the seal are not available (Shastri 1942: 31).

The find-spots of all the eight copperplates cited above indicate that the kingdom of Gopachandra, Dharmaditya and Samacharadeva extended over a vast territory from Baleshwar in Orissa, through southern part of West Bengal (Vardhamana-bhukti) to southern part of Bangladesh (Navyavakashika and Varakamandala). Analysing the copperplates, Morrison (1980) shows that the form of government of the three monarchs was imperial. It was structured as "a graded territorial hierarchy under the authority of an emperor" and operated in four tiers: the central imperial government; the regional imperial government of units such as Navyavakashika *bhukti*; the *vishaya* administration of units such as Varakamandala and the local government formed by the *adhikarana* (council) and local notables (*mahattaras*) (Morrison 1980: 137, 146).

The Faridpur Copperplate of Gopachandra, Faridpur Copperplates 1 and 2 of Dharmaditya and the Ghugrahati Copperplate of Samacharadeva were all issued from the district (*vishaya*) court of Varakamandala, under Navyavakashika *bhukti* or province. The location of Navyavakashika *bhukti* cited in the copperplates may not be too difficult to surmise. If we remind ourselves (i) that the sea retreated from the Khulna region and the Kotalipara area around the 2nd century CE and (ii) 'Navyavakashika' denotes 'newly formed land' (Ray 1994: 272-273), then Navyavakashika *bhukti* must surely denote the entire Khulna and Faridpur region.

The exact location of Varakamandala has not been mentioned in the copperplates. Nevertheless, as Morrison (1980: 34) argues, "the place of issue [of all the four plates mentioned above] was almost surely within close proximity of Kotwalipara [Kotalipara] for the officers who are involved are spoken of as being local men, participating in local transaction". There actually is enough reason to believe that Varakamandala was the district around Kotalipara and the latter (i.e., Kotalipara) was the headquarters of Varakamandala. The reasons are as follows: (i) the land transferred in the Ghugrahati Copperplate lay within the jurisdiction of Varakamandala *vishaya*, (ii) the land has been located as lying close to Govindapur village, which has been identified as Gopendrachoraka village mentioned in the copperplate (Bhattasali 1925-26: 86) and (iii) the copperplate was found at Ghugrahati, 3.22 or 4.83 km from Kotalipara. The Kurapala Copperplate is yet to be deciphered. Nevertheless, the fact that it was found at Kurapala (situated between Ghugrahati and Kotalipara) and that it was issued during the reign of Samacharadeva indicates that its content may be similar to the Ghugrahati Copperplate. The existence of a fortified city (Chandravarmakota) near the transferred land, as cited in the Ghugrahati Copperplate, can only mean that Kotalipara was important enough to be an administrative centre. As a corollary to the above, Bhattasali's identification of Kotalipara as Chandravarmakota is indeed acceptable.

As Sircar (1986: 363) argues, Varakamandala *vishaya* must have included parts of Rajbari district as well because Dhruvilati mentioned in the Faridpur Copperplate of Gopachandra and Faridpur Copperplate 1 of Dharmaditya has been identified with modern Dhulat (near Pangsha, south of the Padma in the Rajbari district and about 45 km (28 miles) to the north-west of the Faridpur town). The following excerpt from the Faridpur Copperplate 1 of Dharmaditya also indicates that Varakamandala *vishaya* was a littoral region. "There is prevalent in this district [i.e., Varakamandala *vishaya*] the rule of sale of lands at the rate of four Dinaras for each Kulyavapa, – a custom, established in the countries bordering the Eastern Sea" (Mukherji and Maity 1967: 77). There can be little doubt that the Eastern Sea or *prak-samudra* cited in the copperplate could only have been the Bay of Bengal. This is further confirmed by Islam's study on coastline changes discussed earlier.

As the following excerpt from the Dharmaditya's Faridpur Copperplate 1 reveals, Varakamandala *vishaya* has more surprises to offer than being just a littoral region.

> The boundary indications [of the land granted] are stated as follows: On the east land, measuring a Pataka, belonging to Himasena; On the south the village of Trighattika and the land granted by the other copper-plate charter; On the west the locality of Shilakunda, belonging to the village of Trighattika, and on the north, the ship-building harbour (*navata-kshe-ni*) and the Pataka of land, belonging to Himasena (Mukherji and Maity 1967: 77-78).

The village of Trighattika cited in the copperplate, as Sircar (1986: 366) observes, was possibly a locality having three *ghats* (wharf or landing stages on a river). More interesting is the reference to *na-vata-ksheni* or 'shipbuilding harbour', for it indeed establishes the existence of a shipbuilding technology in Varakamandala *vishaya*.

These deductions, added to the fact that the district headquarter Chandravarmakota was situated near the sea, on the bank of a major outlet of the Ganga, make it easy to believe that there existed a port at Chandravarmakota to facilitate connection with rest of the district as well as the kingdom. This appears to be almost a foregone conclusion given the fact that pre-modern communication in Bengal was primarily riverine. We may further argue that the harbour at Chandravarmakota (which must have lain outside the fortified city, on the bank of the Ghaghar) was not only meant for inland communication but also served maritime activities because of its proximity to the sea. Otherwise, there would be no justification for a trade centre to develop so close to the sea, as the following examination reveals.

Chandravarmakota as a Centre of Trade

If one carefully examines the epigraphic evidence, it is not too difficult to find references to traders, administrative officers in charge of customs and the monetized economy. The Faridpur Copperplate of Gopachandra mentions "principal traders" (*pradhana-vyaparina*) (Mukherji and Maity 1967: 83-85) and the Ghugrahati Copperplate of Samacharadeva mentions "principal men of business" (*pradhana-vyavaha(ri)na*) (Pargiter 1911: 476, 485). These are strong indications that at the district headquarter of Varakamandala, which we have identified with Chandravarmakota, there was a body of merchants who were influential and important enough to participate in local administration.

Faridpur Copperplate of Gopachandra names the viceroy Nagadeva as simultaneously holding the post of the customs officer (*vyaparanda*) of Navyavakashika (Mukherji and Maity 1967: 83-85). The Faridpur Copperplate 1 of Dharmaditya names the administrative officer Gopalasvamin as simultaneously in charge of customs (*visayadhiniyuktak vyaparakarandaya*) of Varakamandala *vishaya* under Navyavakashika (Mukherji and Maity 1967: 79-81). That the state maintained the office of customs officer (*vyaparanda*), which high-ranking administrators held, implies that trade was of considerable importance to the state.

Because metallic currency is high value and low volume medium-of-exchange and hence easier to carry over a long distance, their existence implies trade, particularly long distance (including maritime) trade. Numismatic and epigraphic evidence clearly show that the traders mentioned in the copperplates cited above not only used gold and silver coins in their transactions but also bullion (silver dust or *churni*) and cowries.

The use of *dinara* for sale transactions of land during the reign of Dharmaditya is recorded in the Faridpur Copperplate 1 of Dharmaditya (Mukherji and Maity 1967: 77). Similarly, the Faridpur Copperplate of Gopachandra and the Mallasarul Copperplate (Mukherji and Maity 1967: 85, 93) also bear testimony to the use of *dinara*. The Faridpur Copperplate 2 of Dharmaditya refers to silver coins and *gandakas* in addition to *dinaras*. Mukherjee (1993: 6) amends the relevant passage for making it intelligible and renders it as "six *puranas*, filled up with *gandakas* instead of "three silver coins and six *gandakas*" as given in Mukherji and Maity (1967: 82). He then goes on to argue that payment of *puranas* or units of *puranas* was made in *gandakas* (denoting 'four') of *kapardakas* (cowries). Thus he concludes that in the kingdom of Dharmaditya, gold *dinaras*, silver coins and cowries were used as a medium of exchange. Mukherjee's argument is acceptable because the passage as rendered by Mukherji and Maity is quite meaningless since *gandakas* denote 'four'. Hence it must be read to imply "six *gandakas* (of *kapardakas*)". One may thus accept the epigraphic evidence as testifying the use of *dinaras*, silver currency and cowries in the kingdom of Gopachandra and Dharmaditya in the 6th century CE.

Because all the three Faridpur copperplates refer to transaction of land with gold coins, we may make two inferences: (1) that the economy at Varakamandala was monetized and (2) that "sale of land for cash ... implies rich trade in the neighbourhood" (Kosambi 1970: 107). However, since no minted coin bearing the names of Dharmaditya and Gopachandra have come down to us, it may be reasonable to assume that during the reign of the above mentioned rulers, Imperial Gupta gold and silver coins were in circulation in their kingdom. This is all the more acceptable if we remember that during Dharmaditya and Gopachandra's reign, the Guptas were ruling over north Bengal. Furthermore, according to O'Malley's (1925: 16) report published in the *Bengal District Gazetteer (Faridpur)*, "[g]old coins of Chandragupta II and Skandhagupta ... [were] found in a field called

Sonakanduri in the village of Guakhola, about three-quarters of a mile [1.6 km] west of the south-west corner of the fort of Kotalipara". The find spot lies on the east bank of the river Ghaghar. As Rashid (1975: 43) shows, four gold-coins were found at the spot: three of Skandhagupta and one of Chandragupta II.

By the time of Samacharadeva, the state was issuing gold coins of its own because coins issued by the monarch have been recovered from a hoard in Muhammadpur in Jessore region (Bangladesh) (Mitra 1852: 401-402) and another from Hasnan in Hooghly district, West Bengal, India (*IAR* 1971-72: 72 & pl. LXVIII, nos. B-C). This may be accepted as an indication that by the time of Samacharadeva, the economy of his kingdom was stronger than before.

Beside gold *dinaras*, silver coins and cowries, the kingdom of Gopachandra and his successors also knew the use of dust money. In the Jayrampur Copperplate inscription of the time of Gopachandra regnal year 1, we come across a curious term *'churnikas'*, when it announces that the annual tax to be paid for the land granted was to be a lump sum (*arya-pindaka*) of 100 churnikas (Sircar 1986: 531). Sircar (1951-52: 45) explains this curious use of the terms by citing Oriya lexicons where *churni* and *purana* are used as synonyms of *kahana* or Sanskrit *karshapana*. Based on the conversion rate given in a commentary of Varahamihira's *Brihatsamhita* by Utpala in the 10th century CE, where one *purana* (also called *karshapana*) was shown equivalent to 1280 cowrie-shells (*svetika*) (Dvivedi 1897: 987), we may further note that *churni*, *purana* and *karshapana* were all equal to 1280 cowrie-shells. If the word *churni* can be taken to be a derivative from the stem *churnin*, meaning "made or mixed up with anything powdered or pounded", then it is possible to accept Mukherjee's (1982: 70) interpretation that the term *churni* denoted "dust money'.

Since we learn from the account of the Arab traveller and merchant Sulaiman al-Tajir that in the 9th century CE, exchanges were carried out in Gurjara Pratihara Empire with silver and gold dust (Sulaiman 1867: 4), Mukherjee's proposition is very much plausible, especially because, as Sulaiman (1867: 5) and Ibn Khurdadba (1867: 14) inform us, plenty of gold and silver were available in the Pala kingdom (Ruhmi). As a proof of actual use of "dust money", one may cite a Tibetan account, according to which one Nag-tcho was dispatched from Tibet to Vikramashila monastery at Antichak village, Bhagalpur district in Bihar in the second quarter of the 11th century CE to facilitate Atisha Dipankara's visit to Tibet. For his expenses he was given 35 ounces of gold. At Vikramshila when Nag-tsho met Atisha, he presented to him a bar of gold and gold dust in a small bag (Das 1965: 60, 65).

Since we have established *churni* as a synonym of silver *karshapana* (the standard weight of which was 32 ratis), we may agree with Mukherjee (1982: 70) that it signified "a unit of silver in dust weighing 32 ratis … equal in value to 1280 cowries". Hence, the Jayarampur inscription of Gopachandra clearly indicates that besides Gupta gold and silver coins and cowries, silver dust (*churni*) was also used as a medium of exchange in the region of Dandabhukti in Medinipur district, West Bengal, India) during the reign of Gopachandra.

A large number of debased and crude imitations of Gupta gold coins have also been found at Kotalipara, among which names of only two monarchs have been read with certainty. They are Prithuvir and Sudhanyaditya (Majumdar 1943: 53-54). Mukherjee (1993: 43, 30) has shown that the correct reading of "Sudhanya(ditya)" is Vasuvarmana and that Prithuvira could also be read as Prithuva(ba)la. As Mukherjee (1993: 43) further shows, Vasuvarmana was possibly a ruler of Kamrupa and the successor of Devavarmana (possibly the same Devavarma or T'i-p'o-po-mo whom Yijing mentions in his preface to the *Biography of Eminent Monks or Kao-Seng chuan*, Lahiri 1986: 50-51), who in turn was the successor of Bhaskaravarman of Kamrupa. Vasuvarman's coins have also been found at Dhaka (including Sabhar), Bogura and Cumilla (Mainamati, Salban Vihāra, Period III, cell 91) (Rashid 1975: 53). On the other hand, Prithuvira or Prithuva(ba)la was possibly a ruler of Samatata after Balabhatta (late 7th or early 8th century CE) (Mukherjee 1993: 30). His coins have also been found at Pilak area in South Tripura (Mukherjee 1993: Plate VIII.3). Besides these imitation Gupta coins, those issued by Shashanka (the ruler of Gauda from sometime before 606 CE till a little before 637-38 CE) have also been found on the bank of the river Arunkhali at Muhammadpur (now in Magura district, about 50 km northwest of Ghugrahati) (Mitra 1852: 402; Mukherjee 1993: 20).

That all these post-Gupta and imitation-Gupta coins were found in the kingdom of Gopachandra, Dharmaditya and Samacharadeva clearly indicate that the traders of the kingdom conducted trade with neighbouring kingdoms. Discovery of Shashanka's coins implies trade contact with Gauda in the first half of the 6th century CE, Vasuvarmana's coins implies trade contact with Kamrupa in the second half of the 7th century CE while that of Prithuvira or Prithuva(ba)la or Prithubhatta's coins at the same place implies trade contact with Samatata in the early 8th century CE. It is noteworthy that a hoard containing coins of Chandragupta II, Kumaragupta I, Skandhagupta, Shashanka and Samacharadeva was found near Arunkhali River in Muhammadpur (Magura district) (Mitra 1852: 401-402; Mukherjee 1993: 7, 20). Another hoard containing coins of Samacharadeva was found at Hasnan in Hooghly district (Mukherjee 1993: 7). The Muhammadpur hoard definitely indicates the existence of a trade centre since it was found near a river (which implies availability of riverine mode of communication) and since no coin in the hoard dated after Samacharadeva's coins (which implies that the hoard is from the time of Samacharadeva). Hence we may believe with enough justification that beside Kotalipara, there were other trade centres in the kingdom of Gopachandra and his successors.

We may sum up our findings in this section by observing that evidence of circulation of metallic currency, existence of traders and custom officials at Chandravarmakota clearly indicate that it functioned as an exchange centre in the 6th century CE. Furthermore, there is enough evidence to believe that there were more such trade centres in the kingdom of Gopachandra and his successors and that the traders of the kingdom maintained trade contact with neighbouring kingdoms of Gauda, Kamrupa and Samatata. These indications confirm our finding made in the previous section that Chandravarmakota was indeed a port and that Gauda, Kamrupa and Samatata were part of the hinterland that the port of Chandravarmakota served.

Period of Operation

The dominant but as-yet-unproven hypothesis that the fortified city was founded by Chandravarma, cited in the Susunia Rock Inscription and the Allahabad Prashasti is based on similarity of name. Actually it was Bhattasali (1925-26: 86) who initiated the hypothesis and argued, "the fortified settlement at Kotalipara may be approximately dated about 315" by the same Chandravarma of Susunia fame. Chandravarma is identified in the Susunia Rock Inscription (4th century CE) as the "son of the illustrious Maharaja Singhavarman, the lord of Pushkarana" (identified with Pokharana on the bank of River Damodar in the district of Bankura, West Bengal, India) (Mukherji and Maity 1967: 41). Chandravarma cited in the Allahabad Prashasti is one of a number of kings of Aryavarta who were uprooted by Samudragupta (Raychaudhuri 1943: 30). At the present stage of our knowledge, we have no way to prove or disprove the hypothesis.

Nevertheless, because we have shown that there is all likelihood that Ptolemy's Tilogramon was indeed Kotalipara as Rashid (1991: 130) suggested, and then it follows that the port at Chandravarmakota must have existed in the 2nd century CE. Actually, it is possible that the port began to function much earlier, towards the beginning of the early historic period, very much like two other early historic ports of Bengal – Wari-Bateshwar and Gangê. There are at least two features that the port at Chandravarmakota has in common with the other two ports: (i) that it was an estuarine port and (ii) that a fortified city existed in its immediate vicinity. Having stated as much, we must concede nevertheless that these are tentative suggestions and we have to wait for results derived from excavations for an answer carrying greater certainty.

Clearly, the reason for the decline of Chandravarmakota is linked with the formation of swamps that lie in and around Kotalipara. Bhattasali (1925-26: 85) argued quite strongly that Chandravarmakota was abandoned as a "gubernatorial head-quarters … about the 5th or the 6th year of the reign of Dharmaditya owing to an earthquake", but it continued to function as a district headquarters. He built his argument on the ground that the Ghugrahati plate granted almost the entire land in Vyaghrachoraka, which is described in the copperplate as "full of pits and (..) infested with wild beasts" (Bhattasali 1925-26: 79), to a Brahmin for no consideration. As the copperplate clearly shows, the land in Vyaghrachoraka was bounded "on the west, [by] a corner of Chandravarman's fortified city" (Bhattasali 1925-26: 79).

Bhattasali was quite wrong about Chandravarmakota being abandoned in the mid-6th century CE because the numismatic evidence clearly shows that mercantile activities must have continued at the site till the early 8th century CE. Hence we may tentatively propose till further material evidence is discovered that it fell into disuse shortly after, i.e., in the mid-8th century CE.

At the end of our deliberation, we must concede that our argument has a few loose ends. Absence of literary evidence regarding maritime activities at Chandravarmakota is one of these. However, this is not entirely unexpected because we do not also hear of Wari-Bateshwar from any literary source. Furthermore, almost the entire bulk of such evidence from the 4th century CE to the 7th century CE has been provided by Buddhist pilgrims, who visited only those places which were important as Buddhist pilgrimage sites or learning centres. Since these were absent in Kotalipara (the state appears to have been strongly inclined to Brahmanism as the 'Seated Lakshmi' device in the coins of Samacharadeva indicate), it is quite natural that they did not visit this part of Bengal.

Although Bhattasali was quite wrong about Chandravarmakota being abandoned in the mid-6th century CE, we must concede that the point that he raised regarding Vyaghrachoraka argues against the case that we have built: why at all should a flourishing commercial centre and a maritime port have a large tract of land quite near it which is of so little commercial value? To be quite honest, we have no answer to this question since we have so little information about habitation at the site.

It is also significant that the *Christian Topography* composed some years before the mid-6th century CE by Kosmas Indikopleustes, a much-travelled Alexandrian merchant who turned into a monk, lists the following as the most notable places of trade in South Asia during his time but in which there is no mention of Kotalipara (Chandravarmakota).

> Sindu, Orrhotha [a port possibly in Saurashtra], Calliana, Sibor [seaport, probably Chaul, 37 km south of Bombay], and then the five marts of Male which export pepper: Parti, Mangarouth [Mangalor], Salopatana, Nalopatana, Poudopatana [the last three being situated somewhere between Mangalor and Calicut]. Then out in the ocean at the distance of about five days and nights from the continent lies Sielediba that is Taprobane [Ceylon]. And then again on the continent is Marallo, a mart exporting chank-shells, then Caber [Kaveripattam] which exports alabandēnum [unknown], and then farther away is the clove country, then Tzinista, which produces the silk (Book XI) (McCrindle 1897: 366-367).

Unless the clove country mentioned above is Bengal, which is extremely unlikely, Kosmas Indikopleustes testimony would imply that Kotalipara (Chandravarmakota) was possibly a port of lesser magnitude.

Notwithstanding Bhattasali's point regarding Vyaghrachoraka "full of pits and (..) infested with wild beasts" and Kosmas Indikopleustes' silence regarding Chandravarmakota, we may still argue with equanimity that Chandravarmakota's claim to a maritime port stands its ground on the merit of numismatic, epigraphic and physiographic evidence. What is imperative now is to conduct an extensive exploration and a full-scale archaeological excavation at the site in order to eliminate the doubts regarding the existence of a port at Kotalipara.

Chapter Six

The Medieval Port City of Sonargaon

Sonargaon (23.6461° N & 90.5991° E) is today a small town in Narayanganj district situated about 27 km to the southeast of Dhaka city, near the confluence of the Shitalakshya, Dhaleshwari, Brahmaputra and Meghna. The name means 'golden village'. Numerous ruins spread over a vast stretch of land around the town clearly bear evidence that the site was the famed capital of medieval Bengal known by the same name. The "very noble and plentiful" city of 'Cernomen' on the bank of the river 'Gangey' (Ganga) that Nicolò de Conti (the Venetian nobleman who travelled and traded in southern Asia between 1419 and 1444 CE) speaks of may have been Sonargaon as Mills believes (Mills in Ma Huan 1970: 65). His travels described by Ramusic in *Purchas His Pilgrims* are pitifully sketchy to draw a definite conclusion (Purchas 1906: 396). Hence, for the earliest definitive evidence proving Sonargaon as a maritime port we have to depend on the account of Ibn Battuta (1304-1368/69), which is based on his personal experience of his visit to eastern Bengal during the cold weather of 1346-47 (or, as Yule (1866) believes, during the cold weather of 1345-46) (Bhattasali 1922: 143-144). As Ibn Battuta describes,

> We travelled down the river [the Blue River or the Meghna] for fifteen days ... (Then) we reached the city of Sunurkawan [Sonar-

gaon], where we found a junk on the point of sailing for the land of Jawa (Sumatra), which is a journey of forty days from there, so we embarked on it (Gibb 1992: 271).

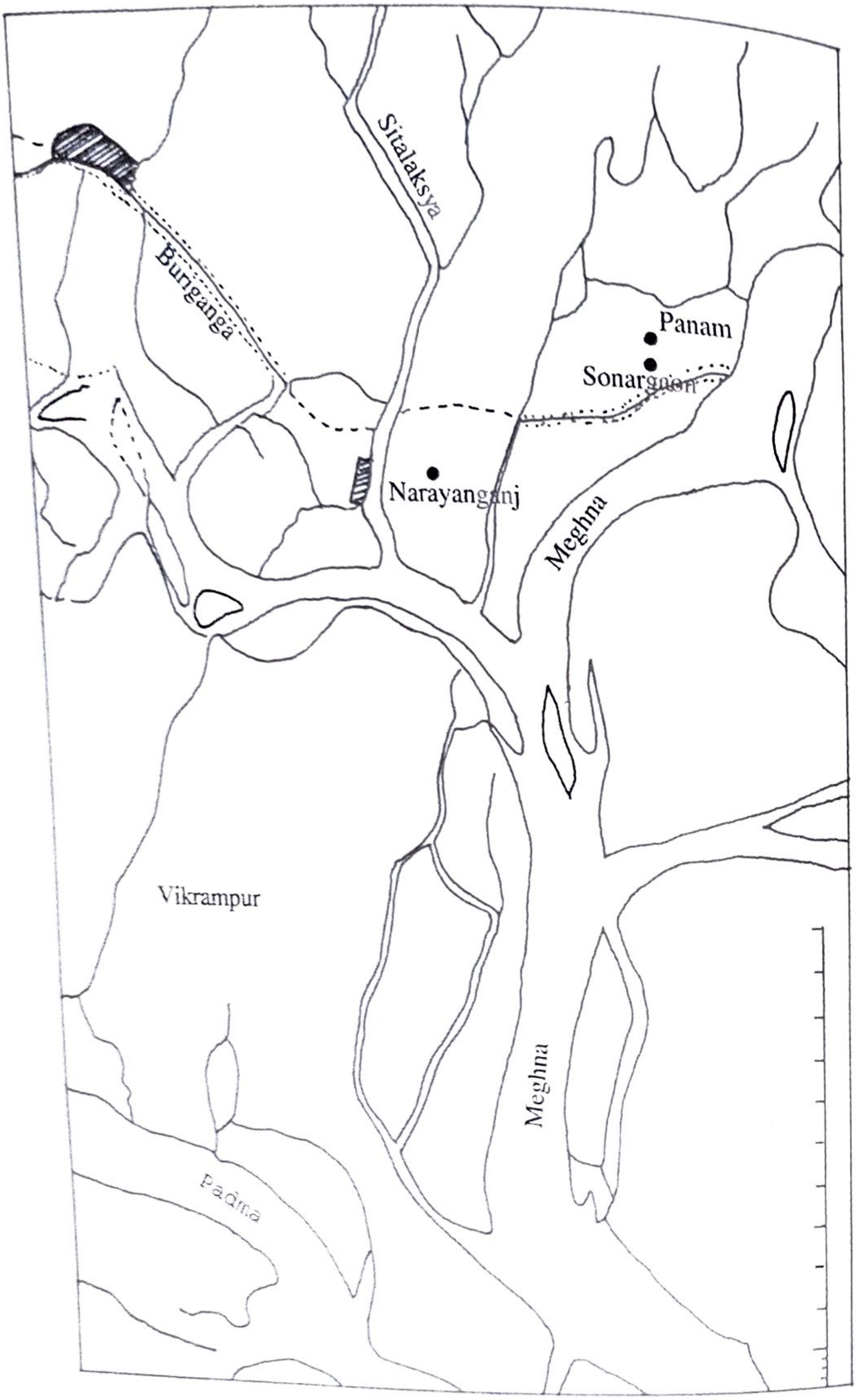

Sitalaksya
Buriganga
Panam
Sonargaon
Narayanganj
Meghna
Vikrampur
Meghna
Padma

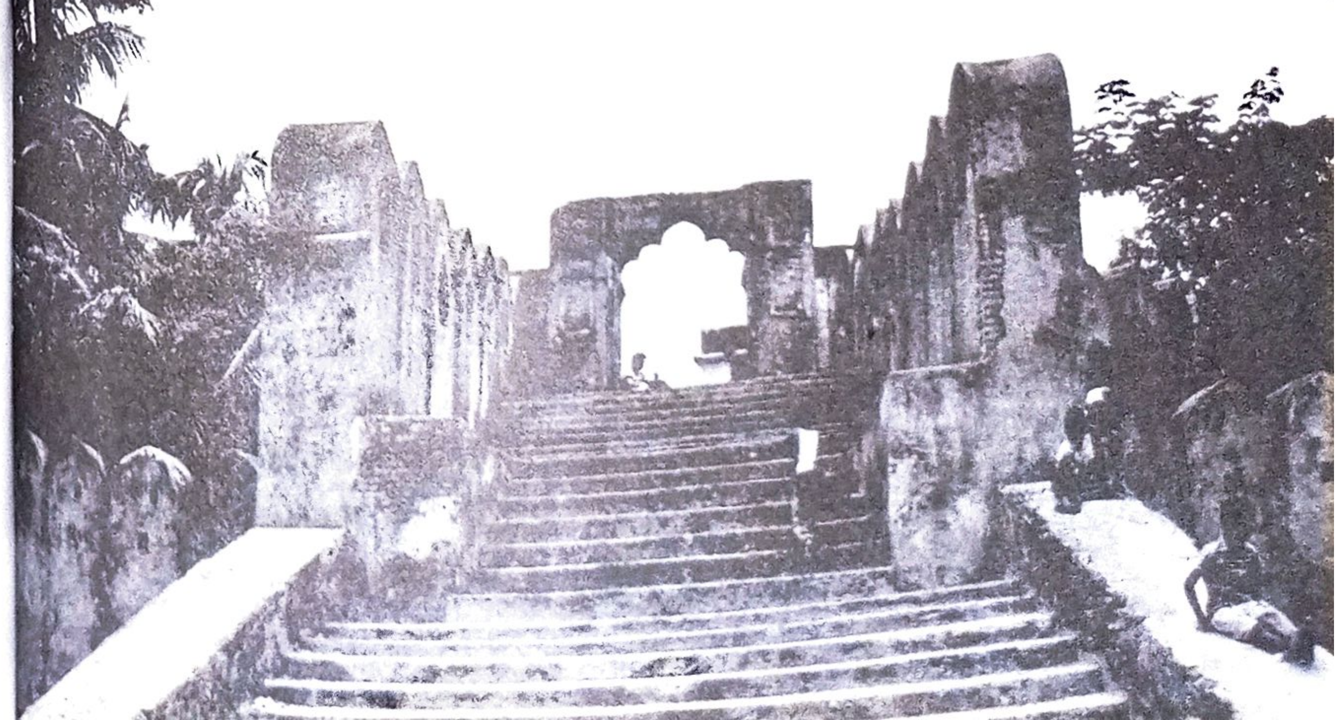
Fig. 6.1 : Map of Sonargaon

While there is no dispute about the administrative and maritime importance of Sonargaon, what is unclear is the period during which the port was functional as well as its exact location. Unfortunately, no systematic archaeological excavation has been conducted at the site. Consequently, the state of current knowledge about Sonargaon is dependent on literary, numismatic, epigraphic and architectural evidence. These, along with topographical features and drainage system of the site will be examined in order to arrive at a clear picture of the location, the period of operation and physical condition of the port.

Topographical Features and Drainage-system

The stretch of land around the present town of Sonargaon (henceforth mentioned as the Sonargaon stretch) is bounded by the Meghna in the east and the Shitalakshya in the west (Fig. 6.1). The Brahmaputra, flowing from the north to the south nearly parallel to the two rivers mentioned above, further bisects it near the middle. Thus, the stretch under review is divided into two unequal halves. A small rivulet called the Menikhali issues from the Meghna near Baidyer Bazar and flows in a south-easterly direction to fall into the Brahmaputra near Kaikar Tek (Jahan 2014). A little south of this junction, a canal named Triveni

Fig. 6.2 : Sonakanda Fort, Narayanganj district, Bangladesh.
Source: shakilbm14.blogspot.com



Khal issues from the Brahmaputra and flows in a south-easterly direction to meet the Shitalakshya near the ruined Mughal fort of Sonakanda (Fig. 6.2). A little to the north of the Menikhali Khal is another rivulet, named Pankhiraj Khal. It flows from the Meghna River, first westward and then southwestward, to meet the Brahmaputra. The east-west rivulets, thus, divide the Sonargaon stretch into five irregular quadrants: two in the west of the Brahmaputra (which will be cited as the northwest and the southwest quadrants) and three in the east of the same river (which will be cited as the northeast, the centre-east and the southeast quadrants). The Shitalakshya and the Brahmaputra meet the Dhaleshwari at the southern extremity of the stretch, and the latter (the Dhaleshwari) flows into the Meghna a little to the east. It becomes immediately apparent that the Sonargaon stretch is extremely significant because of its location near the confluence of four major rivers of the Bengal delta. As will be seen later, the locational significance gave natural advantage to the site not only for trade but for administration also.

Of the five quadrants described above, the northwest, the southwest and the southeast quadrants together form the Meghna-Lakshya Doab. The northeast quadrangle is part of the Old Brahmaputra Floodplain. This part is low and marshy. It is inundated during the rainy season and is cultivated when the rainwater recedes in winter. The centre-east quadrant is highly concentrated with human habitation. It is one of the three isolated bits of the Pleistocene terrace of the Madhupur Tract and hence is a much older formation. The drainage pattern in this isolated bit is entrenched. Quite a few canals, which can still be seen traversing this quadrant, may have arisen out of the natural drainage system.

The Menikhali rivulet, which appears insignificant today, may not have been so in earlier times. James Wise (1874: 94) shows that the Menikhali "was probably the course that [the Meghna] took at some early date". If Wise's view is correct, then the Meghna must have been discharged into the Brahmaputra through this course of the Menikhali. This, indeed, is confirmed by Alexander Cunningham (1969: 137), who, in his *Report of a Tour in Bihar and Bengal in 1879-80*, noted

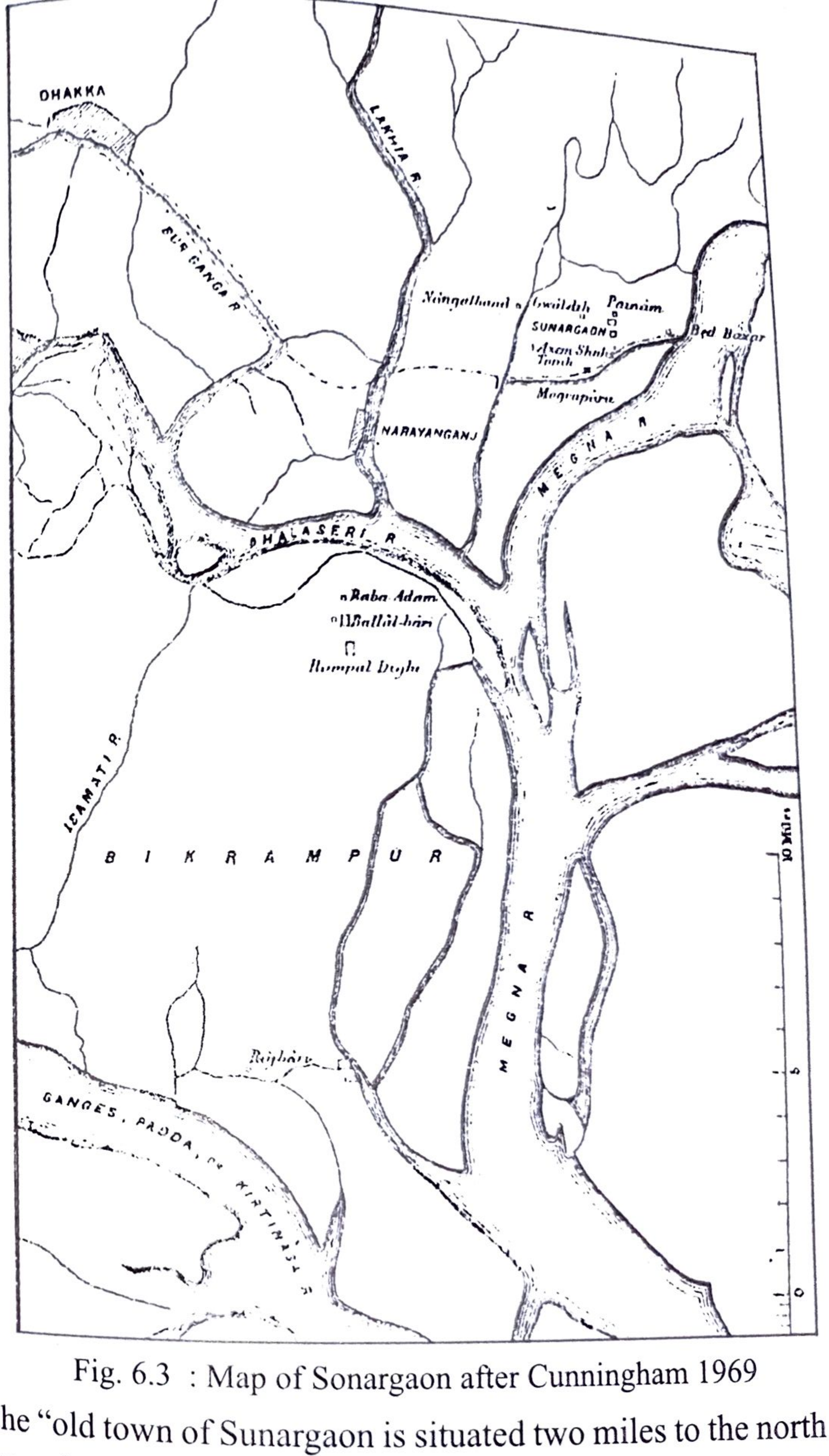

DHAKKA
LAKHIA R.
BURIGANGA R.
Naingalband
Gwaldih
Painam
SUNARGAON
Azam Shah's Tomb
Red Bazar
Mograpara
NARAYANGANJ
MEGNA R.
DHALASERI R.
Baba Adam
Ballal-bari
Rampal Dighi
ICAMATI R.
B I K R A M P U R
MEGNA R.
Rajbari
GANGES, PADDA, or KIRTINASA
10 Miles
5
0

Fig. 6.3 : Map of Sonargaon after Cunningham 1969

that the "old town of Sunargaon is situated two miles to the north of an old branch of the Meghna River, and three miles to the west of the present course of the stream. When the site was first selected, the Brahmaputra flowed three miles to the westward, between the Lakhia River and the present course of the Meghna". Cunningham's 'old branch of the Meghna' must have been the Menikhali because the land between it and the current course of the Meghna (the southeast quadrant) is part of the Meghna-Lakshya Doab and hence a new formation that must have been created by aggradation and sedimentation of the Meghna. Cunningham's observation further proves that the Brahmaputra bounded Sonargaon on the west (Fig. 6.3). This is a clear indication that the city of Sonargaon was located in one of the three eastern quadrants.

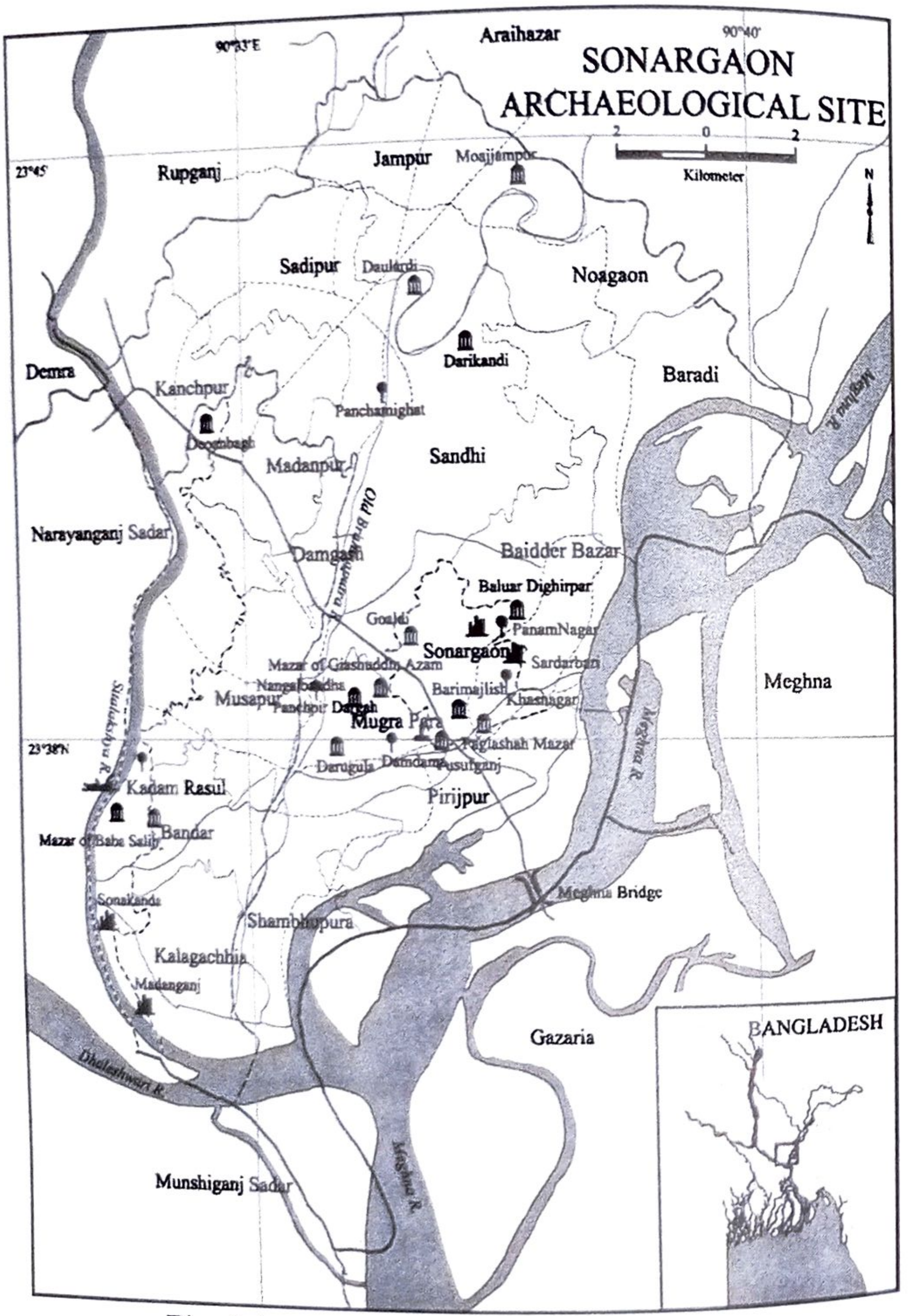

SONARGAON
ARCHAEOLOGICAL SITE
2 0 2
Kilometer
N
90°33'E
90°40'
23°45'
23°38'N
Araihazar
Rupganj
Jampur
Mosjjampur
Sadipur
Daulardi
Noagaon
Darikandi
Baradi
Demra
Kanchpur
Panchamighat
Deonbagh
Madanpur
Sandhi
Old Brahmaputra R.
Narayanganj Sadar
Damgash
Baidder Bazar
Baluar Dighirpar
Goaldi
PanamNagar
Sonargaon
Sardarbari
Mazar of Giashuddin Azam
Nangalbandha
Musapur
Panchpir Dargah
Barimajlish
Khasnagar
Mugra Para
Paglashah Mazar
Darugula
Damdama
Yusufganj
Pirijpur
Shitalakshya R.
Kadam Rasul
Mazar of Baba Salih
Bandar
Meghna
Meghna R.
Meghna Bridge
Sonakanda
Shambhupura
Kalagachhia
Madanganj
Gazaria
Dhaleshwari R.
Munshiganj Sadar
BANGLADESH

Fig. 6.4 : Archaeological sites of Sonargaon.
Source: Banglapedia 2003

The physiographic features discussed above indicates that the site of the ancient city could not have been in the northeastern quadrant because it is a marsh land, nor in the southeastern quadrant because it is a new formation but in the centre-eastern quadrant since it is an older formation and fit for human habitation (proved by high concentration of human habitation seen at present). This is further confirmed by the natives who resided at Sonargaon in the second half of the 19th century CE. According to their verbal testimony, the village of Magrapara (in the centre-east quadrant and on the northern bank of the Menikhali) was the site of the ancient city (Wise 1874: 89). Hence, it appears quite certain that the ancient city of Sonargaon was situated on the northern bank of the Menikhali (hence Ibn Battuta could arrive at the city by sailing down the Meghna River) and was bounded on the west by the Brahmaputra River. Indeed, architectural remains that still stand at the site confirm our deduction.

Architectural Remains

Seven monuments that still stand in the Sonargaon stretch date from the Sultanate period (Fig. 6.4). These are (1) Dewanbagh Mosque (16th century CE) at Madanpur, (2) Bandar Shahi Mosque (1482 CE) at Bandar, (3) Baba Salih's Mosque (1505 CE) at Bandar, (4) the Goyaldi Mosque (1519 CE) at Aminpur, (5) the tomb of Sultan Ghiyath al-Din A'zam Shah (early 15th century CE) at Magrapara, (6) Fath Shah's Mosque (1484 CE) at Magrapara and (7) Yusufganj Mosque (15th century CE) at Magrapara. Another monument, the Muazzampur Shahi Jami Mosque (1432/33-1435/36 CE) stands to the north of the stretch at the village of Mahjampur (the site of Muazzamabad, a mint-town of sultanate Bengal). Of the eight monuments mentioned above, four are situated in the centre-east quadrant, thus marking it out as the area of greatest concentration of architectural remains from the sultanate period. The Khashnagar Dighi (large reservoir) at Panam, extending over an area of 9¾ acres, is also situated in this quadrant. There can be little doubt that the large reservoir is the same that the *A'in-i-Akbari* noted as existing in the Sarkar of Sonargaon, in the township of *Kiyara* (katarah) *Sundar*. The water of the reservoir had the ability to give "a peculiar whiteness to the clothes that [were] washed in it" (Jarrett 1891: 124). The age of the Khashnagar Dighi is unknown. However, the fact that it is cited in the *A'in-i-Akbari* indicates that it existed in pre-Mughal times. Another important remains is the *Damdama* (i.e., fort or its bastion), situated on the bank of the Menikhali rivulet. On physical inspection, it appears to be an elevated ground, circular in shape, surrounded by depressed land on three sides and the Menikhali on the south. No trace of fortification exists today, although local residents claim that earthen ramparts enclosed the circular space. Cunningham (1969: 140) believed that the Damdama was used as "a look-out tower". The period when the fort/tower was constructed is uncertain. However, one may believe that it dates from the Sultanate period because the architectural style of the Sonakanda fort on the eastern bank of the Shitalakshya at Bandar (south-west quadrant) that was reconstructed by Mughal governor Mir Jumla in the 17th century CE is significantly different.

Location of the Harbour

According to Tarafdar (1999: 137), the harbour at Sonargaon was situated in the south-west quadrant, on the eastern bank of the Shitalakshya and was connected to the Meghna by an artificial canal (the Triveni Khal). Aniruddha Ray (1999: 173) also locates the harbour near the same place, at Bandar. Although one may cite the existence of two monuments at Bandar (cited above) to confirm Ray and Tarafdar's view, it is more likely that the harbour was situated on the northern bank of the Menikhali in the centre-east quadrant. Ibn Battuta's testimony confirms our view for he appears to have arrived at Sonargaon directly by the Meghna and does not mention any artificial canal. Furthermore, the settlement pattern, physiographic features and concentration of sultanate monuments indicate that the centre-eastern quadrant was the site of the city. One would obviously expect that the harbour would be located at the same place as the city unless navigability of the river forced the harbour to be moved. It would also be logical to assume that the Brahmaputra was a deeper channel than the Shitalakshya since the Meghna united with it and since the Shitalak-

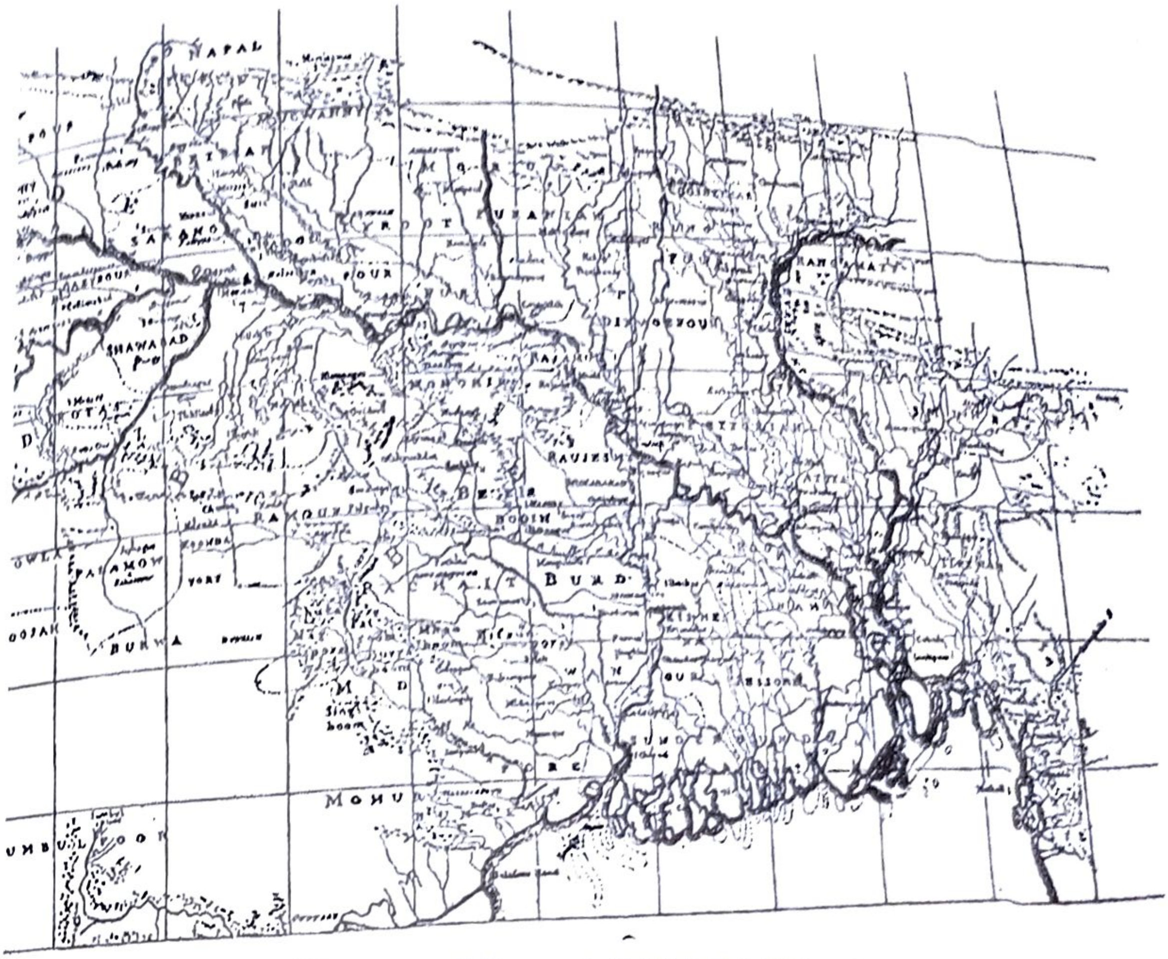


Fig. 6.5 : Rennell's map of Bengal (1764-76 CE) after Majumdar 1943

shya was a distributary of the Brahmaputra. There can be no reason why ships would anchor at the bank of the Shitalakshya and the goods and the passengers would then be transported to the city through an artificial channel, unless the Brahmaputra ceased to be navigable by maritime ships.

The Brahmaputra ceased to be navigable when the river abandoned its course that flows past Sonargaon and redirected its water along the course shown in Rennell's map of 1764-76 CE (Fig. 6.5), falling into the Meghna near Bhairab Bazar. In Van den Broucke's map of 1660 CE (Fig. 6.6), we can see the Brahmaputra had already abandoned its old course that flowed to the west of Sonargaon since it is shown uniting with the Meghna (and still retaining the name of Brahmaputra). The Shitalakshya, shown in the map as the River Lecki, is marked out as a wide channel. The Menikhali channel is shown connecting the Shitalakshya and the Brahmaputra (actually the Meghna) and Sonargaon is marked out on the northern bank of the Menikhali. Still a century earlier, in the map of Joao de Barros of 1550 CE, the Shitalakshya is not shown at all. Here too, the Brahmaputra is shown to have united with the Meghna and the combined stream is shown to have united with the Ganga (the Buriganga stream that once flowed past Dhaka city). At the point of confluence is marked out Bander (literally, the 'harbour'). Barros' Bander cannot be contemporary Bandar because it is marked to the west of the Brahmaputra-Meghna, whereas the contemporary Bandar stands on the east bank of the Shitalakshya. The Bander in de Barros' map can only be the harbour of Sonargaon. The Menikhali is absent in this map. We have no map to show the courses of the rivers in earlier centuries but can only refer back to the topographical features discussed earlier to believe that prior to 1550, the Brahmaputra flowed past the western end of Sonargaon and was joined by the Meghna through the Menikhali.

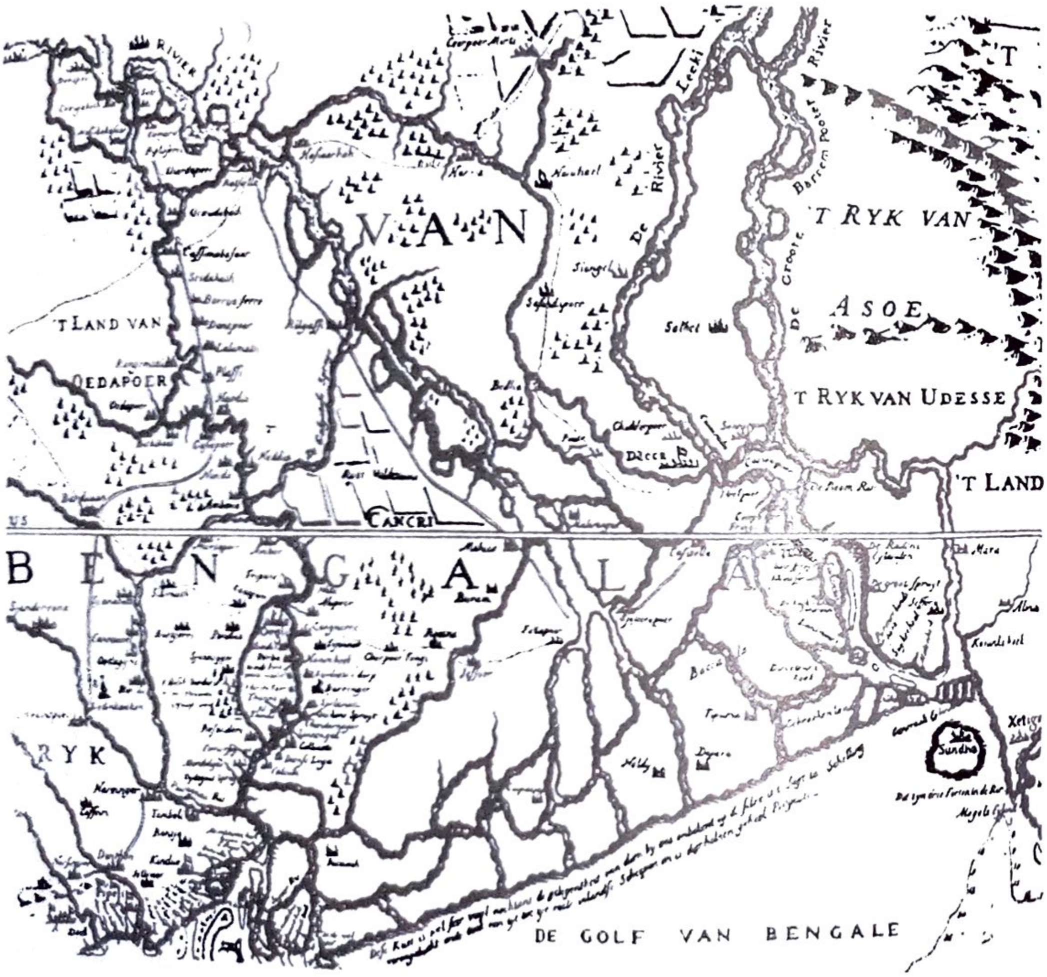

VAN
'T RYK VAN
ASOE
T RYK VAN UDESSE
'T LAND
'T LAND VAN
OEDAPOER
CANCRI
B E N G A L A
RYK
DE GOLF VAN BENGALE
De Rivier
De Groote Rivier
Barrem pooter Rivier
Lecki
Dacca
Sandiva

Fig. 6.6 : Van den Broucke's map of 1660 CE after Majumdar 1943

Period of Operation

It appears quite certain from the above discussion that the Brahmaputra had already changed its course by the mid-16th century CE. When Fei Sin visited the sultanate of Bengal in the early 15th century (1411-1414 CE), he spoke of only one port at Ch'a-ti-kiang (Chattogram) (Bagchi 1945: 120). We hear of Sonargaon also from Ma Huan, whose account, as narrated in *Ying-yai sheng-lan* (1451 CE) is based on first-hand information that he gathered during his visit to Pang-ko-la (Vangala or sultanate Bengal). He was attached as an official translator to the fourth, sixth and seventh Chinese naval expeditions carried out under the command of Grand Eunuch Cheng Ho. In the seventh expedition carried out in 1431-1433 CE, Ma Huan sailed in a detached fleet straight from China to Bengal. On this occasion, he reached Bengal in the first half of 1432 CE (Ma Huan 1970: 35). Ma Huan (1970: 159-160) clearly says that one had to change to a small ship at Chattogram to reach Sonargaon. He disembarked from the small ship at Sonargaon and then journeyed to the capital. The draught of the junks by which Ma Huan and the Chinese delegation arrived at Chattogram was at least 6.10 m (Ma Huan 1970: 31). It must have been much too large for the combined stream of the Ganga and the Brahmaputra that discharged into the Bay of Bengal and hence they had to re-embark on a smaller vessel. Thus it appears that by the mid-15th century CE, only smaller ships used to ply to Sonargaon.

In 1586 CE, Ralph Fitch also appears to have had sailed for Pegu in a small ship or foist, not from Sonargaon but from Serrepore (Sripur near Rajbari), situated six leagues from Sonargaon, at the confluence of the Meghna and the Padma (Foster 1968: 28). Wise (1874: 87) is more specific about the location of Sripur for he says it was nearly 24 km south-west of Sonargaon. Furthermore, Ralph Fitch describes Sonargaon not as a port but as an important mart. Even Tome Pires, the Writer and Accountant of the Portuguese factory in Malacca who completed writing his *Suma Oriental* between 1512-1515 CE, does not mention Sonargaon. These references indicate that Sonargaon completely ceased to be a maritime port sometime between the mid-15th and the early 16th century CE. We may tentatively fix the date to the second half of the 15th century CE.

Having thus ascertained the date of Sonargaon's demise; we may now investigate its rise. Raychaudhuri (1943: 33) believes it was in or after the 13th century CE when one comes across the name of Sonargaon for the first time in *Tarikh-i-Firoz Shahi* by Zia-ud-Din Barni. While describing Sultan Ghiyath al-Din Balban's military expedition in Bengal to punish his rebellious governor Mughisuddin Tughral (1268-1281 CE) who had declared independence, Barni describes Balban entering into an agreement with Rai Danuj of Sonargaon. In c. 1280 CE, "Balban marched with all speed, and in a few days arrived at Sunarganw. The Rai of that place, by name Danuj Rai, met the Sultan, and an agreement was made with him that he should guard against the escape of Tughril by water" (Barni 1871: 116). It is generally accepted that Rai Danuj cited above was Dasharathadeva (Ariraja Danujmadhava), a powerful monarch whose kingdom extended over eastern Bengal. From five copperplate land grants issued by Dasharathadeva and his father Damodaradeva, Sircar (1982: 141-142) has shown that they belong to the Deva dynasty, originally feudatory rulers under the Senas in south-eastern Bengal. Dasharathadeva (c. 1255-1290 CE) appears to have inherited his father's kingdom in Cumilla, Noakhali and Chattogram and assumed the title of a sovereign monarch. From the Adavadi copperplate that he issued from Vikrampura in 1283 CE (Majumdar 1929: 181-82) it becomes clear that he had swept the Senas from power since Vikrampura is known to have been the Sena capital after the advent of Bakhtiyar Khalji's reign in north Bengal. Although Raychaudhuri (1943: 33) inferred from Barni's reference to the meeting of Danuj Rai and Balban that Dasharathadeva had transferred his capital from Vikrampura to Suvarnagrama (Sonargaon) sometime before 1280 CE, Qanungo (1948: 64) has rightly pointed out that the meeting took place at the frontier of Sonargaon and not in Sonargaon. The Adavadi copperplate clearly shows Vikrampura was very much in existence in 1283 CE. We have no other evidence to show why, if at all, the capital was shifted to Sonargaon.

Be that as it may, it seems highly unlikely that a maritime port would have existed at Sonargaon simply because one does not come across any indicator substantiating maritime trade.

It is uncertain as to when exactly the Muslims conquered Sonargaon. Nevertheless, we can easily see a dramatic rise in the fortune of the city from the early 14th century CE. In 1301 CE, Shams al-Din Firuz Shah (1301-1322) established his independent dynasty and issued coins from Sonargaon, the earliest of which dates from 1305 CE. This may be taken as a clear indicator that the city was becoming economically and commercially significant. Shams al-Din Firuz Shah's son Ghiyath al-Din Bahadur Shah minted gold and silver coins from Sonargaon. In one such coin minted in 1328 CE, the city is styled Hazrat Sonargaon, which indicates further rise of its importance. During the reign of Fakhr al-Din Mubarak Shah and his House (1338-1352 CE), the status of Sonargaon was further elevated because it became the capital of an independent Sultanate in eastern Bengal. Hence, there can be no doubt regarding the administrative importance of the city in the 1330s. It was a little after this time that Ibn Battuta visited Sonargaon. The impression that one derives from his account (Gibb 1992: 267; Bhattasali 1922: 135-136) is that its exchange-centre offered a variety of commodities, specially rice and cotton cloth, at a very competitive price and that silver as well as gold coins were in circulation. Since Sonargaon was already a maritime port in the 1340s when Ibn Battuta visited, and since coins began to be issued from here from 1305 CE, one may confidently suggest that the port established contact with international maritime trade networks in the early 14th century CE.

Physical Condition of the Port

As already established above, the location of the harbour on the north bank of the Menikhali (Meghna) clearly shows Sonargaon was an estuarine port. It is possible that no jetties were constructed at the harbour since this is a typical feature of all estuarine ports of South Asia built during pre-modern times. Ibn Battuta's testimony appears to indicate that in the 14th century CE, large ships with considerable draught could anchor on the bank of the Menikhali (Meghna). As Fei Sin and Ma Huan's testimonies indicate, the port could handle ships with shallow draught only from the early 15th century CE. Ibn Battuta's testimony establishes that the port facilitated transportation of passengers. Although Nicolò de Conti's testimony is sketchy, it too suggests transportation of passengers and connection with the port of Chattogram. Silver and gold coins minted at the city indicate the trade was monetary based. The port must have fetched considerable revenue for the state exchequer because even in the late 16th century CE, when the port had significantly declined, it fetched 82,632 *dams* (copper coin) (Jarrett 1891: 138).

The Khashnagar Dighi indicates that there was a production centre of cotton textiles in Sonargaon. As noted above, Ibn Battuta's testimony indicates the city was also a significant exchange-centre. In the early 15th century CE, Fei Sin saw bazars "which carries on a business in all kinds of goods" (Bagchi 1945: 121). The same is confirmed by two other Chinese literary sources, *Si yang ch'ao kung tien lu* by Huang Sing-ts'eng (1520 CE) and *Shu yu chou tseu lu* (1574 CE) (Bagchi 1945: 123, 130). Ralph Fitch's account adds a few more details.

> The houses here, as they be in the most part of India, are very little, and covered with strawe, and have a fewe mats round the walls, and the doors to keepe out the tygers and the foxes. Many of the people are very rich (Foster 1968: 28).

Of course Fitch's testimony is well beyond our time frame. Nevertheless, if we are prepared to see that he is speaking of a time when the glory of Sonargaon was already a matter of past and make due consideration for the time of its glory, we may add quite a few brick-built structures and paved streets to the picture. The architectural monuments that still stand on the site will surely vouchsafe in favour of our conjecture. Till detailed excavation is carried out at the site, we have to remain satisfied with this conjectural image of the medieval port of Sonargaon.

Chapter Seven

Satgaon: The Porto Pequeno de Bengala

The maritime port of Satgaon was located at the village of Satgaon (modern Saptagram), lying within Latitude 22.96225° N and Longitude 88.368769° E, in Chinsurah subdivision of Hooghly district, West Bengal, India. The Portuguese called it *Porto Pequeno de Bengala* (literally, the small port of Bengal) in contradistinction to Chittagong Port, which they called Porto Grande de Bengala (the great port of Bengal) (Campos 1919: 21). Wilford (1799: 278) describes it as "Ganges Regia", while Maulavi Abdus Salam, the translator of *Riyazu-s-Salatin* (1786-1788 CE), as the site of "the ancient royal port … of Bengal" (Salim 1904: 29n). Although Maulavi Abdus Salam locates the site of the port "at the point of junction of the Hooghly and the holy Saraswati" (Salim 1904: 29n) and Campos (1919: 21-22), "on the river Saraswati, which branches off from the Hooghly below Triveni", Niharranjan Ray (1994: 247) is correct in locating it "beside the Saraswati", about 3.22 km from Triveni and "very close to the confluence with the Bhagirathi". This location is clearly marked out in Joao de Barros' map of 1550 CE, which shows "Satigam" on the north bank of the Saraswati River, a little to the west of its confluence with the Bhagirathi and the Yamuna. The port was also known as Saptagram, the name having derived from seven villages which were consecrated to seven sages (Hunter 1876: 309). Testimonies provided by Tome Pires (1512-1515 CE), Cesare Federici (1567 CE), Ralph Fitch (1586 CE) and quite a few literary works from the end of the 15th century CE leave no doubt that the village of Satgaon and its vicinity was indeed the site of the famous medieval port called as *Porto Pequeno* by the Portuguese. However, the rise and fall of the port need to be confirmed.

Period of Operation

The early history of Saptagram is uncertain. Nevertheless, there have been a few attempts to prove that it functioned as a maritime port right from the early historic period. "From ancient times", said Campos (1919: 21), "the chief port and emporium of trade on the Western side of Bengal, was Satgaon, …". Echoing similar views, Rev. James Long states that Satgaon was "the royal emporium of Bengal from the time of Pliny down to the arrival of the Portuguese" (Hunter 1876: 309). Citing Pliny and Ptolemy, he attempts to show that "Triveni was formerly noted for its trade" (Hunter 1876: 311). Unfortunately Pliny makes no mention of either Saptagram or Triveni. Ptolemy mentions Triveni, but only as a sacred place from where three rivers part in three directions (Sastri 1927: 99, 101). The early medieval accounts of Persian and Arab travellers, geographers and merchants are also silent regarding Satgaon or Saptagram. Although Long's argument does not appear to stand ground, there may be a grain of truth in his assertion.

A small-scale excavation conducted at Saptagram on the bank of the river Saraswati revealed punch-marked and cast copper coins, few shards of the Northern Black Polished Ware (NBPW), terracotta objects, Rouletted Ware, Black Ware, medieval pottery and architectural members detached from Brahmanical shrines (IAR 1961-62: 59; Ray 1998: 30). Remains of ships have reportedly been found on the southern bank of the Saraswati near Adi Saptagram (old Trish-bigha) railway station (Ray 1999: 156). Unfortunately, no information on ship-fragments is available. Nevertheless, the remaining archaeological materials prove beyond doubt human settlement existed here in the early historic period. Since it was situated on the bank of a major outlet of the Ganga, one may logically assume that in the early historic period, Saptagram was a riverine port. The architectural members detached from Brahmanical shrines and numerous stone images from the Pala-Sena period reportedly found at Satgaon (Ray 1999: 153) are indicators that the site was a religious centre in the early medieval period. The same is true of neighbouring Triveni, as vouchsafed by "clear traces of mutilated Hindu idols" seen on the walls of the mosque of Zafar Khan Ghazi at Triveni (Blochmann 1870: 282). However, all the material evidence mentioned above attest that the primary importance of Saptagram and Triveni in the early medieval period was more religious in nature than trade and commerce. Satgaon may have been "Saptagram that figures so prominently in the ancient Puranas" (Campos 1919: 22), but the maritime port of Satgaon emerged during the Muslim rule as architectural remains, numismatic and literary evidence amply testify.

Satgaon came under Muslim rule for the first time in 1298 CE when Zafar Khan Ghazi conquered it. However, it was not until 1313 CE, during the reign of Sultan Shams al-Din Firuz Shah (1301-1322 CE) that the Muslims succeeded in conquering the entire region around Satgaon (Rahim *et al.* 1981: 208). In 1324 CE, Delhi Sultan Ghiyath al-Din Tughluq (1320-1325 CE) conquered Bengal and during the reign of his eldest son Delhi Sultan Muhammad bin Tughluq (1325-1351 CE), Bengal was divided into three administrative units and Satgaon was made the centre of one of these (the other two being Sonargaon and Lakhnauti) (Rahim *et al.* 1981: 212). Satgaon is mentioned for the first time in Muslim historical accounts in the *Tarikh-i-Firoz Shahi* of Zia-ud-Din Barni (1285-1358 CE) who notes that Sultan Muhammad bin Tughluq "brought the people of many countries under his rule in Hindustan" including Sat-ganw, Lakhnauti and Sunar-ganw (Barni 1871: 235-236). His note clearly indicates that by 1325 CE, Satgaon had become as important as Lakhnauti and Sonargaon.

Satgaon was developed as a mint-town in 729 AH/1328-1329 CE (Ray and Akhtaruzzaman 2003: 117). The earliest existing specimen minted at this town is dated 1329 CE and the last in 1552 CE (Ray 1999: 153). The earliest gold coin minted from Satgaon was in 734

AH/1333-1334 CE when Muhammad bin Tughlaq struck one in his name. "*Arshah* Satgaon" inscribed on his coins (Tarafdar 1999: 121) indicate that the administrative unit of Satgaon was known as an *arshah* (equivalent to *zilla* or district of later times as Karim 1987: 413 shows). These are clear signs that the city was becoming economically and commercially significant in the 1320s and the 1330s. In the early 16th century CE, Tome Pires (1967: 91) described Satgaon as "a good port" with a "good entrance". Since deterioration in navigability due to siltation may have occurred in later times, we can confidently believe that the Saraswati was navigable by maritime vessels in the early 14th century CE.

Since (1) archaeological evidence suggest that Satgaon has been serving as a riverine port from the early historic period; (2) the drainage system of the site was favourable for navigation by maritime vessels in the early 14th century CE, (3) it became an important administrative centre in 1324 CE and (4) coins began to be issued from here from 1329 CE, one may confidently suggest that the city established contact with international maritime trade networks in the second quarter of the 14th century CE. Hence, Niharranjan Ray's (1994: 247) opinion that Satgaon grew up as a large port-city "[s]omewhere in the second half of the thirteenth century" is invalid and needs to be revised.

The most prosperous period for Satgaon as a port may have been between the mid-15th and early 16th century CE. One of the reasons, as Ray (1999: 154-155) argues, was the struggle over the port of Chattogram between the sultanate of Bengal, the kingdom of Tripura and the kingdom of Arakan. The demise of Satgaon began in the latter part of the 16th century CE, because of silting of the River Saraswati. "The great stream of the Ganges, which formerly flowed southwards from Satgaon by way of the Saraswati, gradually deserted this channel and diverted its water into the Hooghly, then a comparatively small river" (Hunter 1876: 308). While there is unanimity among scholars that the decay of the port was primarily due to silting of the Saraswati (Ray 1999: 157; Salim 1904: 29; Tarafdar 1999: 137), there exists disagreement as to when it ceased to function completely.

The port was still functioning in 1567 CE when the Venetian merchant Caesar Frederick arrived at Satgaon. However, it was already declining for he describes a place called Buttor, where one had to change to a smaller ship.

> A good Tide's rowing before you come to Satagan [Satgaon], you shall have a place which is called Buttor, and from thence upwards the Ships doe not goe, because that upwards the River is very Shallow, and little water. ... The small Ships goe to Satagan and there they lade (Purchas 1905: 113-114).

That the river was choking Satgaon is further confirmed by Joao de Barros, who writes in the mid-16th century CE "Satgaon is a great and noble city, though less frequented than Chittagong, on account of the port not being so convenient for the entrance and departure of ships" (Hunter 1876: 309).

Ralph Fitch, who arrived at Satgaon (Satagam) in 1586, refers to it not as a port but "a faire citie for a citie of the Moores, and very plentiful of all things" (Foster 1968: 26). By that time Hooghly was already on the rise as a port for, according to Ralph Fitch's description, it had become the *Porto Pequeno* of the Portuguese and "the place where the Portugals keep in the country of Bengala" (Foster 1968: 25). On the other hand, the English trader Peter Mundy, writing from Patna sometime between 1628 and 1634, names six "Ports on the Sea Coast neerest unto Puttana as [he] was informed of by Merchants, etts. in Puttana ..." (Temple 1914: 152). Three of these were in Orissa while the remaining three (Satgaon, Sripur and Chattogram) were in Bengal. What he says of Satgaon clearly shows that ships were being anchored at three harbours, viz. "Hooglee [Hooghly], Heegeele [Hijili in Medinipur district] and Sategame [Satgaon]". While Mundy's account affirms the existence of the port between 1628 and 1634, it also indicates gradual shifting towards Hooghly had already begun. When Manucci arrived in Bengal in 1663, he visited Hooghly, resided there for two months, nearly got married, but made no mention of Satgaon (Manucci 1907, II: 89-95). Obviously, the port had passed into oblivion by then.

Evidently, Satgaon was overtaken by Hooghly. Or rather, on the ashes of the former, arose the latter. In order to ascertain the exact year when Satgaon was abandoned, it may be helpful to turn to Charles Joseph, who describes the following in a paper written in 1841 CE.

> Hooghly owed its celebrity to the Portuguese, before whose time it was probably an inconsiderable village. They are stated to have established a factory and built a fort there in 1599; … The Portuguese settlement appears to have risen rapidly to great magnificence. In 1631, it was besieged by the whole of the Mogul army of Bengal, … It appears that at the time [when it fell in 1632], there were no fewer than sixty-four large vessels, fifty-seven grabs, and two hundred sloops anchored off the town … (Joseph 1881: 792).

Hunter (1876: 310) adds that Hooghly was made a royal port of the Mughals in the same year (i.e., 1632); concurrently, they withdrew all public officers from Satgaon. Thus, with Hooghly enjoying royal patronage, Satgaon must have lost significance as a port immediately or shortly after 1632 CE.

Physical Condition of the Port

Having ascertained the rise and the fall of Satgaon, let us now attempt an assessment of the physical and socio-economic environment of the port-site. A total of seven stone inscriptions have been found at Satgaon, dating from the reign of Rukn al-Din Barbak Shah (1459-1474 CE) to Ala al-Din Husain Shah (1493-1519 CE). These indicate that brick-built structures began appearing at the site from the mid-15th century CE. One of the stone inscriptions dated 1505 CE shows that Sultan Ala al-Din Husain Shah had constructed a bridge to facilitate communication between Satgaon and Triveni (Ray 1999: 155). We may thus surmise that the peak of prosperity of the port-city was reached between the mid-15th and the first quarter of the 16th century CE (Jahan 2006: 40). In the second half of the 19th century CE, Blochmann (1870: 280) found only a ruined brick-built mosque (constructed sometime before 1529-1530 CE) with a few tombs near it as the only remnant of the medieval port and administrative centre. He also noted that the ground between the village (Satgaon), the highway adjacent to it (the Grand Trunk Road) and the Saraswati to be "very uneven, and looks as if it had been the site of an extensive settlement. At one place, not far from the road, the capital of a large pillar emerges from the ground" (Blochmann 1870: 281). In the 1870s, "foundations of a fort built by the Musalmans [were] still visible near the Satgaon bridge" (Hunter 1876: 310). These architectural remains clearly indicate that the port city was spread over a large area and was connected with Triveni. Although the function of all the structures remains unclear, we can definitely say that there were quite a few of them including a mosque, a fort and a bridge. The image thus obtained is affirmed by *Riyazu-s-Salatin*, because it says Satgaon "was a large city, thickly populated, and was the seat of a Governor" (Salim 1904: 29).

European accounts, beginning with Varthema in the early 16th century CE, are nearly silent about the physical aspects of the port. Nevertheless, the map of João de Barros clearly shows that Satgaon was an estuarine port and the harbour was located on the south bank of the Saraswati. What possibly existed was a typical temporary landing site similar to the other ports of ancient Bengal. Caesar Frederick's testimony indicates that the port could handle only ships with shallow draught from around the mid-16th century CE. However, Tome Pires' testimony shows that even in the early 16th century CE, it was very much capable of handling ships with considerable draught. As Campos (1919: 22) observed, "[t]he main current of the Hooghly till the mid-16th century CE streamed through the Saraswati; hence the importance of Satgaon which was more accessible to larger ships".

We may believe that storage facilities at the port was similar to what Manrique (1927: 27) describes as existing at Hooghly "at the time that the Emperor Acabar was at the head of the Mogol Monarchy", i.e., 1556-1605 CE.

> Portuguese traders who came from various parts of India with their vessels laden not only to sell the goods they brought, but also to buy and ship the products of that country. With this object they loaded their merchandise and had large golas or store-houses erected, which were divided into chambers by screens made of a kind of strong

> cane, … called by the natives bambus. In these, which they thatched with straw, they kept their goods and wintered [i.e., weathered the rainy season] five or six months, until the return of the season favourable for the homeward voyage (Manrique 1927: 27).

The evidence cited above clearly testifies that the Portuguese merchants of the second half of the 16th century CE did not introduce a new practice. Rather, it is possible that they actually followed local practice since what Manrique describes is clearly reminiscent of Caesar Frederick's description of the temporary exchange-centre at Buttor with "Houses and Shops made of straw" (Purchas 1905: 113-114).

Silver and gold coins minted at Satgaon indicate the trade was monetary based. Caesar Frederick's account of the port shows that it handled "thirtie or five and thirtie ships great and small" each year. If this is what the port handled at a time of its decline, we may presume a higher number when the port was at the peak of its glory in the mid-15th century CE. Frederick's account also shows that the port facilitated transportation of passengers as well as goods. The port must have fetched considerable revenue for the state exchequer because even in the late 16th century CE, as testified by Abu'l-fazl 'Allami's *A'in-i Akbari* (1595-1596 CE), it fetched 12,00,000 *dams* or 30,000 Rupees as revenue annually (Jarrett 1891: 141). Considering that the port was past its prime during the reign of Emperor Akbar, one can safely assume that it must have fetched substantial sum of money for the state when Satgaon was at its prime – and hence it must have had dealt in considerable volume of merchandise.

None of the travel accounts or Bengali literary works indicates that there was any major production centre at Satgaon that produced exportable commodities. We only hear of the production centre from *Riyazu-s-Salatin*, which speaks of "factories of the Christian Portuguese, and other traders" (Salim 1904: 29). However, this testimony must be taken to indicate the condition after 1535 when the sultan of Bengal, Ghiyath al-Din Mahmud Shah (1532-1538 CE), granted permission to the Portuguese to build factories in Satgaon and Chattogram and also to collect excise duties from ships visiting these ports. They established the factories around 1555. As Campos (1919: 113) observed, "Satgaon was the emporium of Portuguese trade since 1537. It was then the chief mart where all the merchants of Northern India flocked with their merchandise".

Quite a few literary works composed by Bengali poets indicate that Satgaon was a major exchange-centre where affluent merchants resided. Important among these is the mangalakavya, the generic name for verse narratives eulogizing various deities (such as Manasa, Chandi, Dharma, Shitala etc.) composed by numerous poets of Bengal (such as Bijaygupta, Bamsidasa, Narayana Deva, Bipradas, Ketakadasa, Kshemananda and Kavikankana Mukunda) between the 13th and 18th century. Some of these are still performed in rural areas of Bangladesh and West Bengal. The mangalakavyas, which are of interest for this study, are the *Manasamangala* (written in praise of goddess Manasa, also known as the *Padma Purana* and the *Manasa Vijaya*) and the *Chandimangala* (written in praise of goddess Chandi), parts of which describe sea-voyages by merchants Chand (in *Manasamangala*), Dhanapati and Srimanta (in *Chandimangala*). However, while examining these narratives, it is important to remember that the descriptions are coloured by fanciful exaggerations. "It is highly probable that these literary works actually contain the animated descriptions of the commercial and maritime activities in Bengali people of the pre-Muslim period", however, and this is more important, "the poets dealing with the subjects belonged to a later age" (Dasgupta 1935: 13-40). Hence, information derived from these narratives needs considerable screening.

In the *Chandimangala* by Kavikankana Mukunda (composed in 1555-1556) describes two trading voyages – one by merchant Dhanapati Datta and the other by his son Srimanta. During their voyages, both Dhanapati and Srimanta halt at Saptagram for two days and trade (Mukunda 1986: 201, 238). Commenting on the port, the poet says, merchants from Kalinga, Telanga, Anga, Vanga, Karnata, Magadha, Maharashtra, Gujarat, Varendra Port, Vindhya, Pingala, Utkala, Dravida, Radha, Vijayanagara, Mathura, Dvarika, Kanchipura, Praraga, Godavari, Gaya, Kocha, Srihatta, Lanka, Malaya country, Bateshwar and many other towns and kingdoms gathered for trading, in their junks (*janga dinga*) laden with goods. The merchants of Saptagram, as a result, do not have to go anywhere and could live luxuriously at home (Mukunda 1986: 237-238).

Vipradasa Pipilai in his *Manasa Vijaya* (composed in 1494) describes rows of houses displaying flags. These appear to be abodes of Hindus because images of various deities are enshrined in these and sounds associated with Hindu rituals are described to be issuing from these. The poet also speaks of numerous Muslims – Mughal, Pathans and others (Sen 1953: 143). Since some of the passages in the *Manasa Vijaya* describing Saptagram are later interpolations (reference to the Mughals, for example), we may turn to Basudev Ghosh, a contemporary of Chaitanya (1486-1533), for greater accuracy.

In his *Karcha*, the poet describes people of almost all occupational groups including *kaviraj*, weaver, barber, *byapari* (a small-scale trader or a peddler), *byabasayi* (a trader) and *banik* (a merchant). Among the merchants, the poet describes the *gandhabanik* or the spice merchants, the *sankhabanik* or the dealers in conch-shells and the *suvarnabanik* or the gold merchants (Ray 1999: 156). Brindabana Dasa's *Srisrichaitanya Bhagabata* (Antya, Chapter 5; 440: 380-381), composed in c. 1537-1538, does not refer to Saptagram as a port but his description gives the impression of a mercantile centre inhabited by numerous Hindu merchants (*banik*) and even a few Muslims (*yavanas*). Vipradasa Pipilai in his *Manasa Vijaya* indicates that Saptagram was a port and was inhabited by very affluent people. However, he does not refer to them specifically as merchants (Sen 1953: 142-143). Jayananda's *Chaitanya-mangala* (1971: 231), composed in c. 1550-1560, makes a brief reference to Saptagram but indicates that the merchants (*banik*) were Hindus and were very affluent.

The essential aspects of the image of Satgaon thus evoked by the Bengali poets are confirmed by European accounts. In the early 16th century, we find Tome Pires (1967: 91) describing Satgaon as "a very good city and rich, where there are many merchants". Le Bleau, who visited Satgaon in 1575, must have been struck by its temples and markets with inexpensive goods because he hardly speaks of anything else (Ray 1999: 156). However, with all its temples, we must not forget the merchants and their maritime trade because it must have been their wealth that supported all these temples.

Chapter Eight

Chattogram Port Prior to the Arrival of the Portuguese

Chattogram (Chittagong) port (22.313° N and 91.800° E) is the only maritime port that still survives ravages of time (Fig. 8.1). It is situated on the north bank of the river Karnaphuli, about 17 km upstream from the mouth of the river (Fig. 8.2). There is very little disagreement that the current site of the port is the same referred to by Ibn Battuta, Ibn Majid, Ma Huan, Fei Sin, Caesar Frederick, Ralph Fitch, Niccolao Manucci, François Bernier, Sebastien Manrique and others. The Arab-Persian traders and travellers have called the port Samandar, Sudkawan and Shatijam, the Europeans have called it Chatigan (and Chatganw), the Chinese, Che-ti-chiang (or Ch'a-ti-kiang), while for the local Muslim rulers it was Islamabad (and Fatehabad). In 1550 CE, Joao de Barros clearly marked the port as Chatigam on his map and in 1660 CE Van den Broucke marked it as Xetiga.

Although the history of the port can be traced back from the time of Ibn Battuta, what seems to be uncertain is when the port was established. No systematic archaeological exploration or excavation has been conducted at Chattogram, which functions today as the prime maritime gateway for Bangladesh. Another problem is that Chattogram is not mentioned by any of its known names in classical Sanskrit literature or inscriptions of the early period. Hence, we have to depend

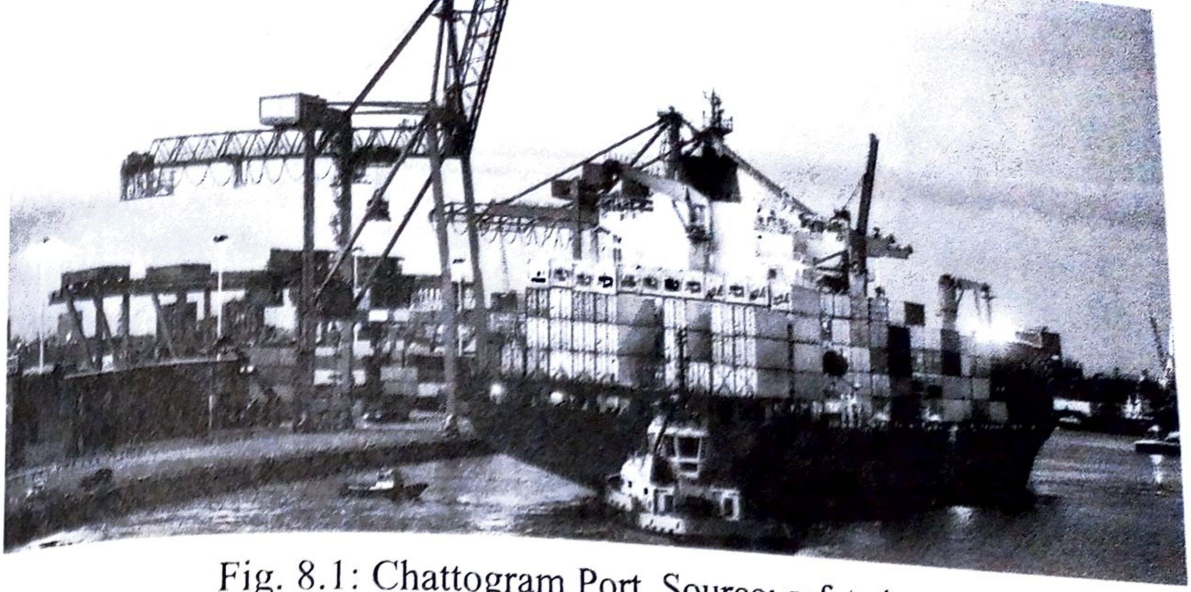


Fig. 8.1: Chattogram Port. Source: safety4sea.com

on the accounts of all travellers, traders, diplomats and missionaries cited above, along with few more, which have left literary references to the port. These, together with epigraphic and numismatic evidence and information derived from ancient and medieval geographical treatises may be pieced together to ascertain when the port of Chattogram was established.

One may begin with Ptolemy's Pentapolis (150° & 18°) (*Geography*, Book VII, Caption 2, 2), because it is the earliest location of the port so far attempted by scholars such as Wilford (1822: 444-445), Sastri (1927: 195) etc. Pentapolis lay in Airrhadoi, which was the entire stretch of land "from the mouth of the Brahmaputra to that of Naf or even lower to Arakan River" (Gerini 1909: 28). The argument put forward in favour of the identification was that 'Pentapolis' denotes an aggregate of five cities while 'Chattogram' in Bangla language is believed to be a derivative of Sanskrit 'Chaturgrama', which denotes an aggregate of four villages. Hence, it is argued that Chattogram (Chittagong) was known as Chaturgrama in the 2nd century CE and Ptolemy must have translated it as Pentapolis.

The position Gerini (1909: 35) obtained for Pentapolis by calculation "falls a short distance below the Chittagong inlet". But after allowing corrections for minor inaccuracies on Ptolemy's part, he locates the

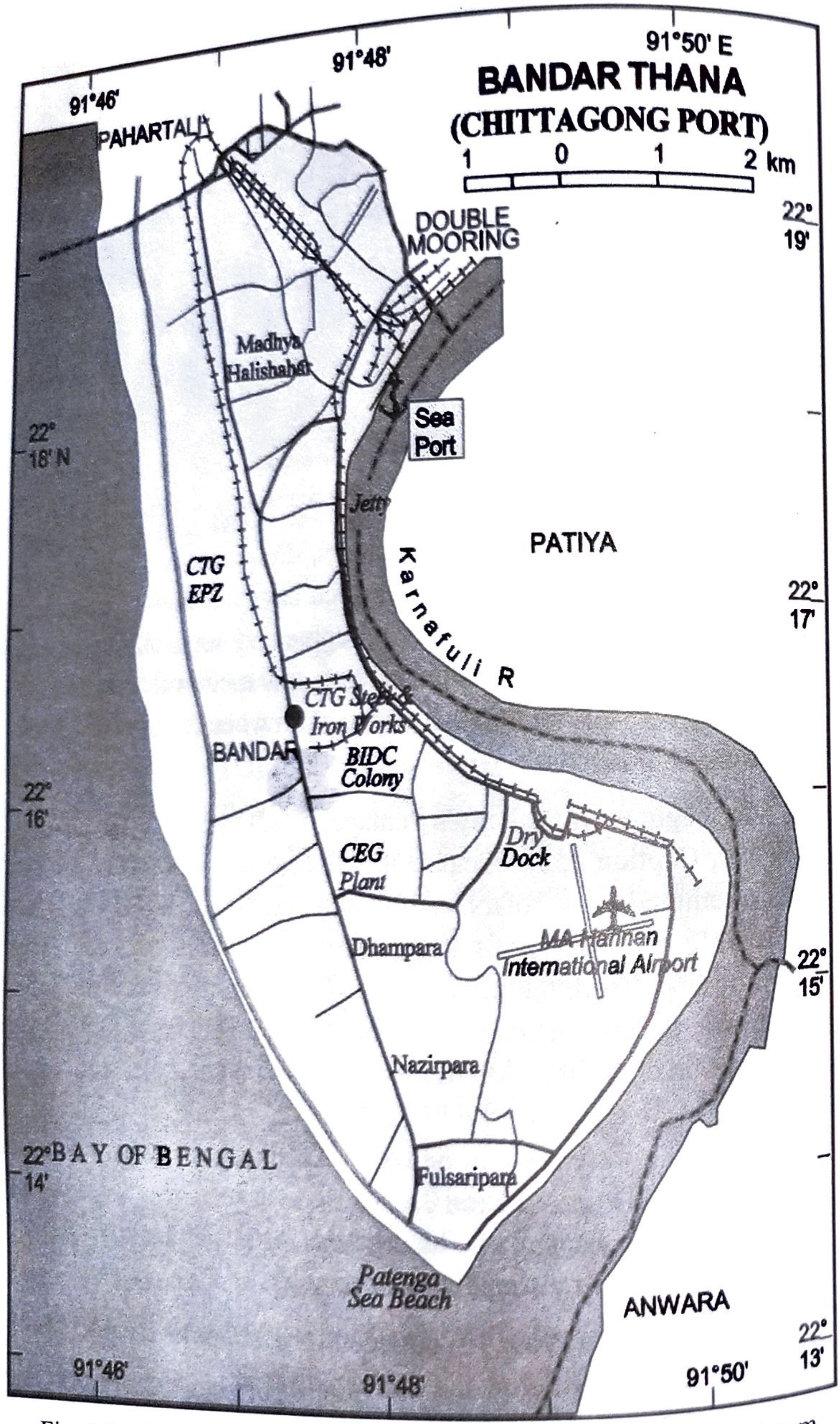

BANDAR THANA
(CHITTAGONG PORT)
1 0 1 2 km
91°46'
91°48'
91°50' E
22° 19'
22° 18' N
22° 17'
22° 16'
22° 15'
22° 14'
22° 13'
PAHARTALI
DOUBLE MOORING
Madhya Halishahar
Sea Port
Jetty
PATIYA
Karnafuli R
CTG EPZ
CTG Steel & Iron Works
BANDAR
BIDC Colony
CEG Plant
Dry Dock
Dhampara
MA Hannan International Airport
Nazirpara
Fulsaripara
BAY OF BENGAL
Patenga Sea Beach
ANWARA
91°46'
91°48'
91°50'

Fig. 8.2: Chattogram Port Channel. Source: ctgreflection.blogspot.com

city "a little further up above the Chittagong inlet, either on the coast or on some of the islands at the embouchure of Old Brahmaputra". Gerini dismisses the identification of Chittagong with Pentapolis on the ground that 'Chattogram' as "the aggregate of four villages" is too far removed etymologically and phonetically from 'Pentapolis' as "the aggregate of five cities". Nevertheless, it is very probable, as Gerini shows, that there existed a sea port or mart known as Pentapolis to Ptolemy and his contemporaries, somewhere on the coast stretching from the Karnaphuli estuary (Chittagong inlet) to the Meghna estuary (embouchure of Old Brahmaputra) or on islands near this coast.

In the 7th century CE, Chinese pilgrims have identified a port named Harikela. According to Yijing, two Chinese monks named Wu-hsing and Chih-hung arrived at Harikela (*O-li-ki-lo or A-li-ki-lo*) by ship from Sri Lanka. He locates the port to the northeast of Sri Lanka, and "on the east of Eastern India", at a distance of about a month's sail (Lahiri 1986: 95). We may remind ourselves that Srichandra's Rampal copperplate (10th century CE) describes King Trailokyachandra (c. 900-929 CE) of the Chandra dynasty as "the support of the royal majesty smiling in the royal umbrella of the king of Harikela" (Basak 1913-14: 141). Hence, the port of Harikela must have been located in the kingdom of Harikela. Furthermore, a large number of coins bearing the legend 'Harikela' and issued between the 7th and the mid-11th centuries CE have been discovered in Chattogram region (near the Chittagong University Campus), Sylhet region, Cumilla region (Mainamati) and Tripura (Belonia and Pilak Pathar). Since Cumilla region is definitely known to have been part of Samatata (testified by Yijing's account of Seng-che Ch'an-shih living in the Raja-vihara in San-mo-tan-t'e or Samatata ruled by the Khadga monarch Rajabhata (Lahiri 1986: 86-87), we may believe that Harikela was Chattogram region north of Karnaphuli. The Harikela coins (Fig. 8.3) were found in neighbouring area such as Tripura, Sylhet and Cumilla regions indicate close commercial connections between these regions. For a more precise location of Harikela we may cite Kantideva's copperplate (9th century CE) (Majumdar 1941-42: 316), which records granting of land at Harikela-mandala. Since the copperplate was discovered

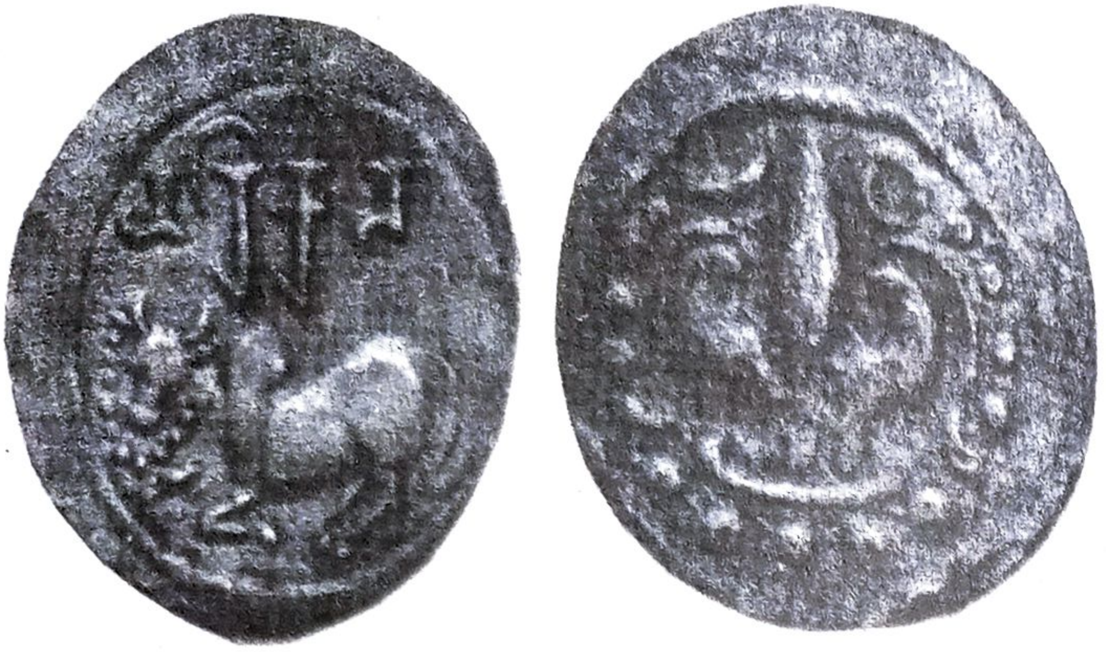


Fig. 8.3: Harikela Coins

at Bara-akhra temple in Chattogram city, we may believe that the granted land was in or near the city. All these evidence indicate that northern Chattogram region was known as Harikela. Hence, it is most likely that the port of Harikela was situated on the coast of northern Chattogram region.

Harikela (or its phonetic derivatives) features in Arab-Perisan geographic treatises as well. In 1120 CE, an Arab author named Sharaf al-Zaman Tahir Marvazi mentions Hd.kira (possibly a phonetic variation of Harikela) as a town "which adjoins the coast of the Sea of Aghbab [i.e. the Bay of Bengal]. This [i.e. the Sea of Aghbab] is an unpleasant sea but on its coast lie many vast towns". Further, he locates the town of Hd.kira in the kingdom of Dhm or Dahum (Chakravarti 1998: 258). Dahum was identified with Harshapala's son Dharmapala (c. 1095-1120 CE) of ancient Assam (Kamrupa), who recovered the lost glory of the kingdom by making conquests in north Bengal and probably towards the sea in the southwest of the kingdom. Thus, Marvazi rightly mentions that Harikela was within the Pala kingdom of Bengal. Another phonetic derivative of Harikela is mentioned in *Hudud al-Alam*, a Persian work on geography by an anonymous author that was composed in 982 CE. It notes "five large towns situated on the sea-coast, .. the royal power [over which] belongs to Dahum". These are N.myas, Harkand, Urshin, S.m.nd.r and Andras

(Minorsky 1937: 87). If Harkand is identified with Harikela, then we must recognize that beside Harikela there was another large town situated on the sea-coast named S.m.nd.r or Samandar.

Samandar features prominently as a port in the works of a number of Arab and Persian geographers, traders and travellers from the 9th to the 14th century CE. Mukherjee (1992: 99), Karim (1987: 62) and Chakravarti (1998: 258) are unanimous in their identification of the port with Chattogram. Among the Arab-Persian sources, the earliest to mention Samandar is Ibn Khurdadhbih (or Ibn Khurdadba) (b. c. 820, d. c. 912 CE) whose work on world geography is titled *Kitab al-Masalik wa'l-Mamalik* (the Book of Roads and Kingdoms). Although the original version of the work prepared in c. 846-47 CE is lost, what survives by the same title is an abridged version prepared not later than 885-86 CE. Ibn Khurdadhbih notes that Samandar was a port where ships would arrive after a journey of around three days from Kalyakan (Calingapatam), al-Lawa and Kanja (two other ports on the eastern coast of India). The port (of Samandar) was located at a distance of fifteen to twenty days' journey by means of a river from Kamrun (Kamrupa in Assam). Two more ports which the merchants would touch after Samandar were Urnshin, located at a distance of four days' journey and from there to Abina, located some four more days' journey away (Ahmad 1989: 5, 22-25). We may infer from Ibn Khurdadhbih's account that Samandar was reachable by a river from Kamrupa that possibly fell in the Bay of Bengal (since our author appears to be describing a route of maritime ships along the western, northern and the eastern coast of the Bay).

Al-Idrisi wrote his book on geography titled *Nuzhatu-l Mushtak* sometime in the mid-12th century CE, gathering information from various authors and travellers. According to him, Samandar (or Samundar as he prefers to call it) was some 48 km from the port of Kanja. He describes Samandar as:

> a large town, commercial, and rich, where there are good profits to be made. It is a port dependent upon Kanauj [Kamrupa?], king of this country. It stands upon a river which comes from the country of Kashmir (Al-Idrisi 1867: 90).

Al-Idrisi (1867: 90) also confirms that merchandise from Kamrupa (Assam) was brought down to the port of Samandar by a river coming from the country of Kashmir. If the country of Kashmir may be taken to imply Tibet, then there is only one river, which fits the description, and it is Brahmaputra. This claim is further justified when one is reminded that Minhaju-d-din's *Tabaqat-i-Nasiri* (1260 CE), while narrating the history of Muhammad Bakhtiyar's ill-fated expedition to Tibet, describes an "exceedingly large" river in front of a town in Kamrud or Kamrupa. In Minhaju-d-din's own words, "It is called Bangamati [i.e., the Brahmaputra]. When it enters the country of Hindustan it receives in the Hindi language the name of Samandar" (*Minhaju-s Siraj* 1869: 310). As we know the Brahmaputra changed its course quite a few times, Al-Idrisi's location of Samandar on "a river which comes from Kashmir" can only mean the Brahmaputra flowing in one of its earlier courses. Hence, Al-Idrisi's account may be taken to indicate that the river from Kamrupa, on the mouth of which was situated Samandar, must have been the Brahmaputra.

Samandar as a port features even in a 14th-century Arab account, titled *Subh-al Asha* by Al-Qalqashandi (c. 1353-1418 CE). The author was a judge in Cairo, who never visited Bengal, but drew his material on topographical description of India from the works of various authors such as Abul Fida, al-Biruni, Ibn Khurdadhbih and others (Zaki 1981: 21, 58). In the Chapter Six of *Subh-al Asha*, where he describes the routes leading to the countries of Sindh and India, he clearly indicates that Samandar was on the coast of the Bay of Bengal.

> One who follows the coastline: from Bullin to Bas, 2 days; then to Sinjili and Kabshakan, 2 days; then to the mouth of the Kudafarid, 3 farsakhs; then to Kaylakan, 2 days; from there to Samandar and from Samandar to Usir, 12 farsakhs; then to Abina, 4 days (Zaki 1981: 94).

Examination of accounts drawn from Ibn Khurdadhbih, *Hudud al-'Alam*, Marvazi, Al-Idrisi and Al-Qalqashandi make it clear that Samandar was definitely in Eastern Bengal, somewhere on the coast and reachable by the river Brahmaputra. If we examine Joao de Barros' map (1550 CE), one cannot but notice the wide estuary of the

Ganga and the Brahmaputra partly blocked by a few islands including Sandwip. Chattogram (Chatigam) is shown on the bank of the Karnaphuli but not far from the coast. More importantly, the mouth of the Karnaphuli appears to be at the southern extremity of the Ganga-Brahmaputra estuary.

We may logically believe that the estuary in the mid-9th century CE (when Ibn Khurdadhbih prepared his original manuscript) must have been still wider with fewer islands compared to that of the mid-16th century CE (as shown in de Barros' map), if we make possible allowances for additional land formation that must have taken place in the intervening seven centuries. This is also indicated, by Islam's (2001: 142) study of coastline changes, which shows that 4000 YBP, the funnel shaped mouth of the Bay was possibly much wider than today and Dhaka was then at the head of the Bay. Hence, the possible location of Samandar that would fit all Arab-Persian accounts is the Chattogram Coast (from the Karnaphuli estuary to the Chota Pheni estuary) and the Noakhali Coast. However, we must not forget the *Hudud*, which indicates that the Harikela and Samandar were two different ports.

Although Lama Taranatha, in his *History of Buddhism in India* (1608 CE) speaks of "a monastery called the Pinda-vihara in the city of Chatighabo in Bhamgala" (Chimpa and Chattopadhyaya 1970: 255), there is no mention of its maritime activities in his reference. Since Taranatha speaks of Chatighabo in the chapter titled "Account of the period of King Gobichandra and Others", it is logical to assume that the city of Chatighabo existed during the reign of the king Govindachandra (c. 1020-1050 CE) of the Chandra dynasty although the Tibetan scholar appears to place the king in the last quarter of the 7th century CE. The Venetian Marco Polo is entirely silent about ports of Bengal. It is most unlikely, as Olschki (1960: 38, n. 73) rightly believes that the Italian adventurer ventured to Bengal, let alone visit Chattogram as Sharif (1375: 175-176) and Chowdhury (1994: 19) believe. *Chu-fan-chi*, composed in the mid-13th century CE, by Chau Ju-kua (Hirth and Rockhill 1965) is also silent about ports in Bengal.

Hence, let us turn to Ibn Battuta (1304-1368/69 CE), whose account is based on personal experience for he visited eastern Bengal in the cold weather of 1346-47 (or 1345-46) CE.

Ibn Battuta sailed from Calicut to the Maldives (Kannalus Island) and after a brief sojourn, sailed for Bengal. He arrived at Sudkawan after 43 nights. In his own words,

> The first city in Bengal that we entered was Sudkawan, a large town on the coast of the great sea. Close by it the river Ganges, to which the Hindus go on pilgrimage, and the river Jun unite and discharge together into the sea (Gibb 1992: 267).

Although some attempts have been made to identify Sudkawan as Satgaon, those can be rejected, as Bhattacharyya (1977: 25) does, because Ibn Battuta situated his port on the "coast of the great sea", which does not agree with the location of Satgaon in the present Hooghly District. According to Gibb, Jun "is Ibn Battuta's transcription for Jumna, here obviously represents the Brahmaputra", Kamru is Kamrupa, the Blue river is the Meghna and Habnaq was a town near Habiganj or perhaps Habiganj itself because a low mound called Habang still stands a little south of Habiganj (Gibb 1992: 366, fn. 7, 9 and 10). Thus there can be no doubt that Sudkawan was Chattogram and by the mid-14th century CE, it was already a well-established port. It is curious that Ibn Battuta had already visited Sudkawan by the time Al-Qalqashandi wrote his work. However, the former makes no mention of Samandar while the latter is completely oblivious about Sudkawan. Since Ibn Battuta's account is based on first-hand experience, and hence more reliable, it is possible to conclude that Al-Qalqashandi's information was outdated, for it was based on Ibn Khurdadhbih. More importantly, Ibn Battuta provides the earliest definitive evidence regarding the existence of Chattogram as a maritime port.

From the first half of the 15th century CE, we have four travel accounts, three of which are Chinese and one, European. The Chinese sources are Ma Huan's *Ying-yai sheng-lan* (1451 CE), Fei Sin's *Hsing-ch'a sheng-lan* (1436 CE) and Kung Chen's *Hsi-yang fan-kuo chih* (1434 CE). The European account is by Nicolò de Conti who sailed from Cernomen (possibly Sonargaon) and left Bengal by way of Buffetanya. Scholars agree that Conti's Buffetanya was Chattogram (Ma Huan 1970: 65). However, there is hardly any information regarding the port of Chattogram. Kung Chen's work (*Hsi-yang fan-kuo chih*) is mostly "a word-for-word reproduction of the *Ying-yai sheng-lan*" (Ma Huan 1970: 57). Hence, we may concentrate on Ma Huan's and Fei Sin's accounts.

Ma Huan, who reached Bengal in the first half of 1432 CE, has precious little to say about the port of Che-ti-chiang.

> Setting sail from the country of Su-men-ta-la [Semudera, on the north coast of Sumatra], you make Mao mountain [Poulo Weh, island off the north coast of Sumatra] and Ts'uilan island [the Nicobar and Andaman islands]; [then] you proceed on a north-westerly course, and, after travelling with a fair wind for twenty days [representing a voyage of 98 km a day], you come first to Che-ti-chiang, where the ship is moored (Ma Huan 1970: 159 and n. 4-7).

From Che-ti-chiang, Ma Huan travelled in a small ship to enter an estuary and after 500 *li* or 281 km, he arrived at So-na-erh-chiang or Sonargaon (Ma Huan 1970: 159-160, n.1). The course of journey that Ma Huan provides makes it clear that Che-ti-chiang is but a phonetic derivative of Chattogram.

The port in Bengal that Fei Sin writes about is Ch'a-ti-kiang (Ch'a-ti-chiang?), which is at slight variance from Ma Huan's Che-ti-chiang. However, there can be little doubt that both the words used by the Chinese are but phonetic derivatives of 'Chittagong'. From Fei Sin one gets an impression that Chattogram was a port of relatively high importance and had a custom station.

> The country has a sea-port on a bay called Ch'a-ti-kiang. Here certain duties are collected. When the king heard that our ships had arrived there, he sent high officers to offer robes and other presents, and over a thousand men and horses also came to the port (Bagchi 1945: 120-121).

Towards the end of the 15th century and the early 16th century CE, we encountered the name of a port called 'Shatijam' in the works composed by two Arab navigators. These are Ibn-Majid's *Kitab al-Fawa'id fi usul al-bahr wa'l-qawa'id* (c. 1489-90 CE), and Sulaiman al-Mahri's *'Umdat al-Mahriya fi dabt al-'ilm al-bahriya* (1511 CE), *Minhaj al-fakhir fi 'ilm al-bahr al-zakhir* and *Tuhfat al-fuhil fi tamhid al-usul* (c. first half of the 16th century CE). Ibn-Majid speaks of Shatijam in a brief qasida on the ending of the sailing season.

> Every late traveller enters Shatijam
>
> When he comes from India and Maldives, so be silent (?) (Tibbetts 1981: 241).

In the *Minhaj*, the bearing Sulaiman al-Mahri provides for Shatijam from Lakifar (possibly a cape near Rabnabad Islands in Barishal region) using Sundib (Sandwip) as an intermediary point, leaves no doubt that the port in question is Chittagong (Tibbetts 1981: 357).

Summing up the geographical treatises and travel accounts cited above, it becomes clear that from the 2nd century CE to the mid-15th century CE, these sources refer to four ports on the coast stretching from the Meghna estuary to the Karnaphuli estuary. These were (1) Pentapolis (2nd century CE), (2) Harikela (7th, 10th and 12th centuries CE), (3) Samandar (9th, 10th, 12th and 14th centuries CE) and (4) Sudkawan/Shatijam/Buffetanya/ Che-ti-chiang (Ch'a-ti-kiang) (14th to the first half of the 16th centuries CE).

In order to locate all these port-sites (considering the possibility that they were separate), an examination of the travels of Sebastien Manrique may be helpful. During his missionary and diplomatic activities in the Chattogram Coast and the Arakanese capital from 1630 CE to 1635 CE, the ports that Manrique touched were Chittagong, Dianga, Ramu, Angarcale (Angerkel) and Mrohaung (the Arakanese capital). Van den Broucke locates Dianga halfway between Chattogram and Ramu, at the Dak'hindanga or Brahmandanga, both on the Sangu River (Blochmann 1968: 25). However, as Sebastien Manrique (1927: 284-285) testifies in his account of Bengal written in the first half of the 17th century CE, Dianga was situated on the southern bank of the Karnaphuli. Hosten (1925: 76) has produced a Dutch print with which he reasonably claims that Dianga was indeed situated on the southern bank. E. Luard and H. Hosten, the translators of *Travels of Fray Sebastien Manrique*, have located Angerkel 4.83 km south of Dianga, also on the bank of the Sangu River, where now stand two villages, Hangarkhali and Hadiyakhali (Manrique 1927: 86, fn. 12). Ramu is situated further south, on the bank of the Ramu or Bakkhali River. Francis Buchanan, who visited this place in 1789, describes the river as deeper than the Mamoree (the Matamuhuri River) at Chakoriya and the tidal current in it went upstream to a considerable distance (Van Schendel 1992: 59). Mrohaung (Mrauk-U), the capital of Arakan from 1433 CE to 1785 CE, was in Akyab district on the bank of the Lemru River.

It is important to note that (1) all the four ports mentioned above were situated not on but a little away from the coast, on the bank of a river and (2) all of them were located south of the Karnaphuli estuary. As we know, Bengal, Arakan, Tripura and the Portuguese fought bitterly over control of the port but none of the parties attempted to build another port north of the Karnaphuli estuary when their adversary had Chattogram under their possession. Physiographic features of the coast clearly explain why they did not. The slope of the continental shelf along the eastern coast of the Bay of Bengal is gentle (2°-8°). Hence, no littoral port is possible in this region. Furthermore, there is no estuary on the coast between the mouth of the Karnaphuli and the mouth of the Chota Pheni since no river falls into the bay down this part of the coast. This can only mean that on the entire coast of Chattogram, no port could ever have existed at any time between the Karnaphuli estuary and the Chota Pheni estuary. If we have to look for port-sites on the Chattogram Coast (including Akyab), they must be the five that Manrique has described: Chittagong, Dianga, Angerkel, Ramu, and Mrohaung.

As for the Noakhali coast, one possible site is the Chota Pheni estuary. However, even today mariners sailing indigenous vessels are hesitant to anchor on the river because, as they say, it is extremely unsafe. Because the channel of the river flows south without any meandering curves, tidal current is strong along the entire navigable stretch. Another possible site, as it was argued by the author elsewhere (Jahan 2000), is Mandari (4 km north of the medieval city of Bhulua) on the Baruni Channel of the Meghna now extinct. However, Mandari is untenable as Samandar because almost the entire Noakhali and south-western part of Cumilla regions is absent in Joao de Barros' map of 1550. As argued earlier, the estuary in the mid-9th century (when Ibn Khurdadhbih prepared his original manuscript) must have been still wider with fewer islands compared to that of the mid-16th century (as shown in de Barros' map). One would logically expect it so because the Middle Meghna Floodplain, the low floodplain of the Tippera Surface and the Meghna Estuarine Floodplain of the Active Delta, being land formations created by sedimentation and accretion, would not have been built in the mid-9th century CE (Jahan 2007a). Hence, Pentapolis, Harikela and Samandar could not have been situated on the Noakhali Coast.

If our argument placed above is tenable, we must believe that Pentapolis, Harikela and Samandar could only have been situated on the Chattogram Coast. Following Gerini's argument, Pentapolis could only be located somewhere on the coast stretching from the Karnaphuli estuary to the Meghna estuary (on Noakhali Coast). The Karnaphuli estuary is the only place that can offer safe anchorage. Hence, not going into the etymology of Chaturgrama, we must trust our knowledge of Chattogram Coast's environment to believe in our deductions made above. The same argument applies for Samandar if the possible location of the port that would fit all Arab-Persian accounts is the Chattogram Coast (from Karnaphuli estuary to the Chota Pheni estuary) and the Noakhali Coast. If we follow the *Hudud*, which indicates that Harikela and Samandar were two different ports, we could eliminate Ramu and Mrohaung from the list of the four that we obtained from Manrique since they are too far south and are linked culturally and historically more with Arakan than Bengal. Hence we may believe that Harikela could have been Dianga or Angerkel, both on the Sangu River. However, as argued above, numismatic and epigraphic evidence appear to indicate that Harikela was in northern Chattogram. If this is tenable, we must believe that the port of Harikela must have been situated on the coast between the Karnaphuli estuary and the Chota Pheni estuary. Once again, because the Karnaphuli estuary is the only possible site for a maritime port, Harikela must have been on the Karnaphuli estuary. This line of argument may be further substantiated by reminding ourselves that the find-spot of the Kantideva's copperplate is Chattogram. If our deliberations are acceptable, we must believe that the *Hudud* was misinformed.

Hence we may believe that the port of Chattogram was already established in the 2nd century CE, when it was known as Pentapolis to the Greco-Romans. From the 9th to 14th centuries CE, it was known as Samandar to the Arab-Persian seafarers and geographers and from the 14th to the first half of the 16th centuries CE, it was known variously as Sudkawan, Shatijam, Chatighabo, Buffetanya and Che-ti-chiang (Ch'a-ti-kiang). The locals knew it as Harikela from the 7th to 10th centuries and from the 10th century onwards, as Chittagong. The name Chittagong may have arisen in 953 CE, if we may accept the testimony of the Arakanese chronicle *Ra-dza-weng*. According to the chronicles, a Buddhist sovereign of the Arakanese Chandra dynasty, named Tsu-la-taing Tsan-daya (951-957 CE), "went on an expedition to Bengal (called Thu-ra-Tan) and set up a stone pillar as a trophy at the place since called Tset-ta-goung, or as commonly written, Chittagong" (Phayre 1844: 36). 'Tset-ta-goung' denotes 'there will be no war'. Citing the Arakanese chronicle Phayre (1844: 36) explains, the pillar was so called because the king remarked that to make war was improper and he abandoned his conquest at the request of his nobles. If 'Chittagong' may be taken to be the phonetic derivation of 'Tset-ta-goung', then this may indeed be the earliest reference to the port by this name (Jahan 2004a: 134). Chattogram, Chatga, Chatighabo, Che-ti-chiang and Ch'a-ti-kiang are all phonetic derivatives of Chittagong.

Now that we have established the rise of Chattogram (Chittagong), let us investigate another moot point regarding the port that has been raised by travel accounts of Ludovico di Varthema, Duarte Barbosa and Tome Pires. These accounts, along with a few other travel accounts and maps from the later date refer to a port called Bengala (or Banghella), which scholars have variously identified as Gaur, Chittagong, Chatgaon, Sonargaon, Sripur and Dianga. It is not within the scope of this research to resolve the issue. However, it is necessary to establish what Varthema, Barbosa and Tome Pires indicated by the port of Bengala since their accounts have important bearings on it.

The Italian traveller Ludovico di Varthema, who arrived at Banghella in c. 1508, locates the port at a distance of 1126.54 km (700 miles or 11 days' sail) from Tenasserim, which is an acceptable approximation of the actual distance between these two points (Varthema 1928: 79). G. Badger, editor of Varthema's *Travels*, works out the distance more accurately and places Banghella "between the Hattia and Sundeep Islands, situated at the present mouth of the Brahmaputra" (Cortesao 1945: 10). The only possible port at this location could be Chattogram.

Duarte Barbosa lived in Portuguese India from 1500 CE to 1516/1517 CE. In his account written in 1518 CE, the Portuguese traveller describes the location of Bengala thus:

> Further on, leaving this River Ganges and following the coast in a northerly direction, comes the kingdom of Bengala wherein are many towns, as well inland as on the coast … this sea is a Gulf which runneth in between two lands and going well into it there is to the north a right great city of the Moors, which they call Bengala, a very excellent sea-haven … (Barbosa 1921: 135-136).

If we remember that the Bay of Bengal converged into a funnel at the mouth of the Meghna – a funnel that was much greater five centuries ago than that seen today – then it is possible to see that one would indeed have to follow "the coast in a northerly direction" to arrive at the heartland of the kingdom of Bengala. Hence the port of Bengala was definitely in eastern Bengal and so one cannot argue that Satgaon was the City of Bengala. There can hardly be any doubt that when Barbosa says, the "sea is a Gulf which runneth in between two lands", he is describing the Bay of Bengal as it is situated between the east coast of south India and Chattogram-Arakan-Tenasserim Coast. Then he says, "going well into it [the Bay of Bengal] there is to the north a right great city of the Moors, which they call Bengala". This part of the description is accurate because the port of Chattogram does indeed lie to the north. Hence, Barbossa's City of Bengala cannot but be Chattogram.

It is not possible that Barbosa mixed up Gaur and Chattogram as one city. Actually, he does not mention the capital city of Bengala even once. As Campos (1919: 21) explains, Chittagong (Chattogram) was the gateway to Gaur.

> When the Portuguese came to Bengal, Chittagong was its chief port, and the main gateway to the royal capital Gaur. … Situated as it is at the mouth of the Meghna, this port was most convenient for navigation. The Meghna was the principal route to Gaur…

Hence, there can be no room for mixing up the capital with the port city. It is clear from the above excerpt that the "great city of the Moors" (as Barbosa said) was none other than Gaur (Gour), which was the old name of northern Sylhet and one of the three petty kingdoms of Sylhet. The other two neighbouring kingdoms were Laur and Jaintia (Hunter 1879; Blochmann 1968; Choudhury 1910: 181).

Tome Pires (1967: 90-91) did not travel to the City of Bengal but says it was the principal port, "Whence the kingdom derive[d] its name. It [took] two days to go from the mouth of the river [Ganges] up to the city …". Clearly, Pires had Gaur or Gour (the kingdom of Sylhet) in mind when he was writing about the City of Bengal in the early 16th century CE. Cortesao, the translator of Pires' *Suma Oriental*, confirms this impression and states that "[t]he 'City of Bengal', was the ancient capital of Bengal, the great historic city of Gaur or Gour" (Pires 1967: 90, fn 2). However, Pires mixed Chattogram with Gaur, for the latter was not a port. Hence, we must accept his testimony regarding the principal port to imply Chattogram and the remaining description to imply Gaur or Gour.

Having now sorted out major questions regarding Chattogram, let us now attempt an assessment of the physical and socio-economic environment of the port-site. As mentioned earlier, no systematic archaeological excavation has yet been carried out at the port-site. From scattered references to the port prior to the advent of the Muslim rule during the reign of Sultan Fakhr al-Din Mubarak Shah (1338-1349 CE), such as Lama Taranath's Pinda-vihara, we may infer that the city was prosperous enough to support famous Buddhist monasteries. The prosperity is vouchsafed by the discovery of Harikela coins and copperplate land grants. However, we have hardly any information regarding the physical environment of the port-site.

Information is relatively more plentiful from circa mid-14th century CE. After his conquest, Fakhr al-Din Mubarak Shah had built a road connecting Chattogram with Chandpur. He also built a mosque and mausoleum, and maintained a powerful naval base at Chattogram. Fei Sin's testimony form the early 15th century, that the king "sent high officers to offer robes and other presents" to the Chinese delegation that arrived and that "over a thousand men and horses came to the port" (Bagchi 1945: 120-121) indicates that the administrative centre at Chattogram was no insignificant frontier outpost. It must have been well managed and administered by high officials. Indeed, a silver coin issued by Sultan Jalal al-Din Muhammad Shah in 818 AH (1415-1416 CE) that bears the imprint of '*Arsah Chatgawn* as the issuing mint (Karim 1960: 81), clearly demonstrates that the administrative unit of Chattogram had attained the status of an *'arsah* (equivalent to *sil* of later times, as noted earlier). It may be recalled that Satgaon was also an '*arsah*, while Muazzamabad near Sonargaon was an *iqlim* (equivalent to an administrative division of later times). Only one architectural monument, a mosque at Jobra village in Hathazari Police Station, bears testimony to the earliest stamp of the Muslim rule. An inscription still stands on a wall of the mosque declaring in Persian that it was built by Rasti Khan in 1460 CE (Alam 1965: 14).

Except for a brief period from 1416 CE to 1420 CE, when Danuj Mardana Deva and his successor Mahendra Deva briefly ruled over Chattogram, the port was under the control of the Bengal Sultanate till the mid-15th century CE. From around the mid-15th to the end of the 15th century CE, it was held by the Arakanese (although the northern part of the Chattogram district, beyond the port, may have been under the domain of the Bengal Sultanate, as the mosque of Rasti Khan indicates). At the end of the continuous tripartite war between Arakan, Bengal and Tripura, the Sultanate of Bengal wrested control of Chattogram in c. 1517 CE (Tarafdar 1999: 60). A new administrative headquarter of the district was established at Fatehabad, 12.87 km (8 miles) to the north of the present location of Chattogram city. According to local historians Nusrat Shah built a mosque and a palace at Fatehabad. Daulat Uzir Bahram Khan, in his *Laili-Majnu* (a narrative in verse composed in the 16th century CE), describes Fatehabad as a beautiful city near the sea-shore and on the bank of the river Karnaphuli, where hundreds of houses stood. Although no extant remains confirm these assertions, it is believed that a mosque at Paragalpur village in Mir Sarai police station was constructed on the ruins of an earlier brick-built mosque erected by Chuti Khan (a general of Sultan Nusrat Shah and a governor of Chattogram) sometime after 1515 CE. Even though no stone inscription has been found, the existence of Chuti Khan's mosque is testified by fragmentary remains inscribed with Arabic alphabets that reportedly lie scattered in the courtyard of the present mosque (Alam 1965: 14). It is possible that most of the structures that were built during the sultanate period were timber-built — a tradition that was common even in the mid-20th century.

When the Portuguese were granted permission to build factories and collect excise duties in Chattogram, they built their warehouse at Firingi Bazar but their fort, church and commercial house was at Dianga. These references indicate that the administrative centre at Chattogram must have gained in prominence, especially after Nusrat Shah.

In the early 15th century CE Chattogram had emerged as a mint-town, as testified by the silver coin issued by Sultan Jalal al-Din Muhammad Shah (1415-1432 CE) cited above. Danuj Mardana Deva and his successor Mahendra Deva also minted coins from Chattogram in 1339 and 1340 Saka, corresponding to April 1416 CE to April 1418 CE. Coins struck by Jalal al-Din Muhammad Shah in 1420 CE and Nasiruddin Mahmud Shah in 1438-39 CE (both sultans of Bengal) and the Arakanese King Basawpyu in 1460 CE (Ray 1999: 362) clearly show the mint was significant enough to be used by Bengal as well as Arakan. The commemorative gold coin issued by King Dhanyamanikya of Tripura on his conquest of the port-town in 1513 CE may have also been minted at Chattogram. We may thus believe that the port assumed tremendous importance in the economy of Bengal, Tripura and Arakan by the early 15th century CE. Because silver coins were minted in the city, there can hardly be any doubt that the trade was monetary based.

Numerous tombs and cenotaphs in Chattogram testify to the proselytizing activities of Muslim saints even before the advent of the Muslim rule. One of the most famous of these is a group of twelve graves, popularly known as the tomb of Bara Aulia, that lie at a village called by the same name, near Kumira. "According to tradition, a Muslim King named Shahaji came to these parts accompanied by twelve saints …" (Ali 1964: 7). Another tomb believed to be of Mohsen Aulia who died in 1397, lies at Bat-tali village, Anwara police station (Alam 1965: 12-13). However, the most famous is the 'tomb' (actually a cenotaph) of Bayazid Bistami or Bostami at Nasirabad, near Chattogram city (Fig. 8.4). The 'tomb' complex consists of a cenotaph (a simple square structure that stands on a mound), a richly decorated 18th century mosque that stands near the base of the mound and a large tank. It is popularly believed that Bayazid Bistami (777-874 CE), a renowned saint who was born in Bistam (Iran), arrived in Chattogram in the 9th century CE and resided there for three years. Although he is said to have travelled extensively, his biography makes no mention of his supposed stay in Chattogram. As Ali (1964: 11-12) says, "It is difficult to believe that Sultan Bayazid Bistami ever came to Chattogram".

If one is prepared to peel through layers of religious legends, and lay aside supernatural fabrications for the devotees, it is possible to link these saints with Muslim merchants who began visiting Samandar from the 9th century CE or even earlier. Although we have no conclusive evidence from the history of Bengal, the Arakanese chronicles provide an important clue. Citing the chronicles, Phayre (1844: 36) has shown that during the reign of the king Ma-ha-toing Tsan-da-ya or Maha Taing Chandra (r. 788-810 CE), "several *Ku-la*, or foreign ships, were wrecked upon the Island of Ran-byi, and the people in them said to be Mussalmans, were sent to Arakan proper, where they were settled in villages". Khurdadhbih's *Kitab al-Masalik wa'l-Mamalik*, the original version of which must have been prepared c. 840 CE, shows that Arab-Persian scholars were informed about the maritime routes to Bengal by the mid-9th century CE. Hence, the actual journey by Arab-Persian mariners must have begun earlier, i.e., end of the 8th century CE as indicated by the Arakanese chronicle and many of the much-revered Muslim saints may have been Muslim merchants from the Middle-east.

The current location of the harbour of Chattogram port on the bank of the Karnaphuli indicates that it was always an estuarine port. There is no material evidence found for installation of jetties at the harbour prior to the arrival of the Portuguese. Temporary landing arrangements may have been made for embarkation and disembarkation of passengers and goods from ships that anchored at the harbour. As mentioned earlier, the draught of the junks by which Ma Huan and the Chinese delegation arrived at Chattogram was at least 6.10 m (Ma Huan 1970: 31). Hence Ma Huan's (1970: 159) testimony, that their ships were "moored" at Che-ti-chiang, appears to indicate that large ships with draught of 6.10 m or more could anchor at Chattogram in

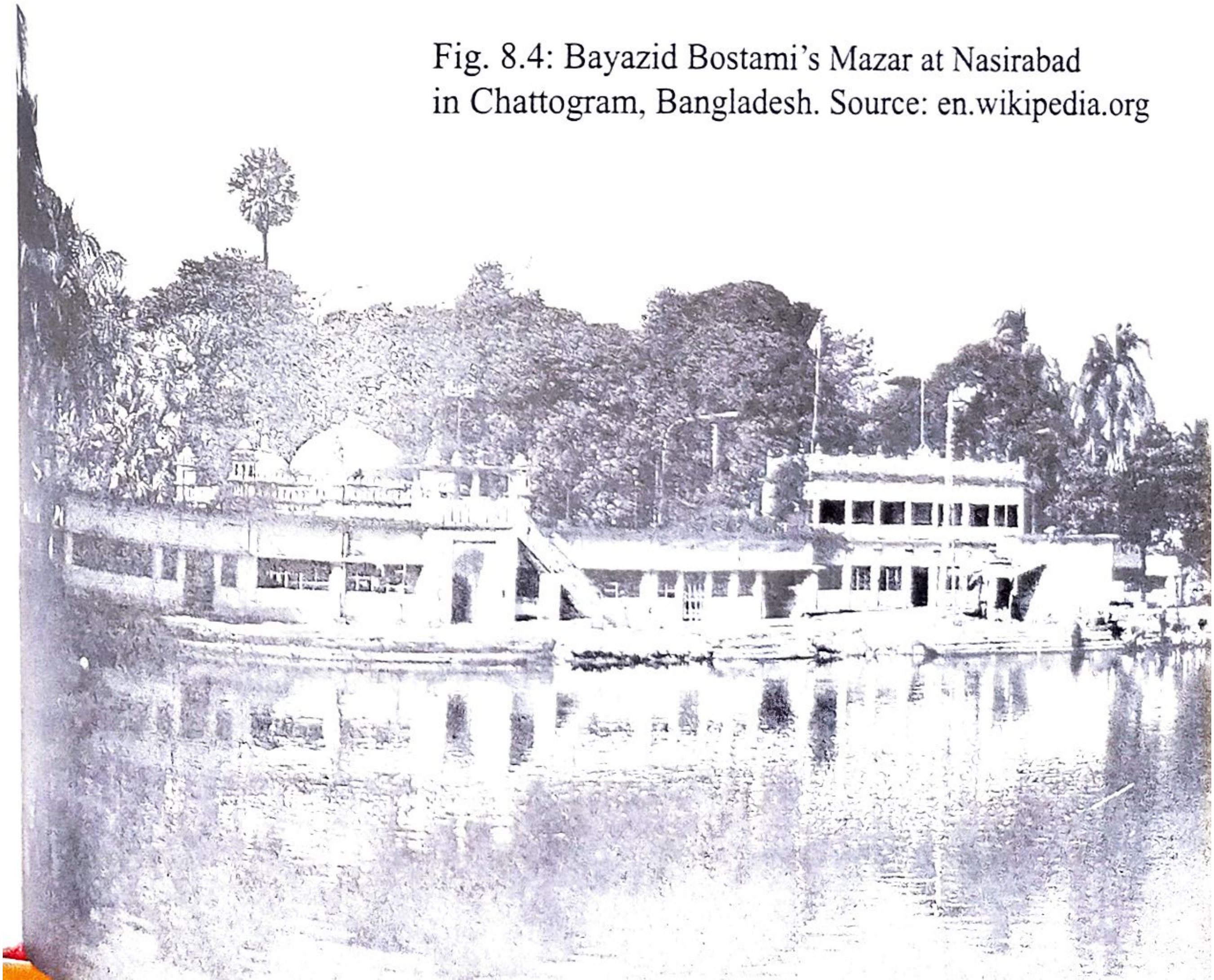


Fig. 8.4: Bayazid Bostami's Mazar at Nasirabad in Chattogram, Bangladesh. Source: en.wikipedia.org

the first half of the 15th century CE. Even in the early 16th century CE, Barbosa (1921: 136) vouchsafes that the port of Chattogram possessed a very good harbor.

Although the port of Chattogram was situated on the Karnaphuli, we need not assume that the harbour always lay on the north bank as it does today. Blaev's map (1650) and Vignorla's map (1683) place a port named 'Bengala' on the southern bank of the Karnaphuli. Hosten (1925: 76) and Majumdar (1940: 231-232) also place it on the south bank, identifying it with Dianga. As argued earlier, Dianga was on the bank of the Sangu River, as Blochmann has shown. Nevertheless, the maps, charts and argument of scholars noted above indicate the possibility that the harbour of Chattogram may have existed on both the north and the south bank of the Karnaphuli. Or it could be that the Arakanese chose the south bank for strategic purpose (because they were geographically situated in the south and hence it would have been easier to maintain direct access by land); while the sultanate of Bengal chose the north bank for similar strategic purposes (because they were geographically situated to the north of the port).

We have no information as to what facilities the port provided. Because Fei Sin's account shows that at Ch'a-ti-kiang "certain duties are collected" (Bagchi 1945: 120), we may believe that there was a customhouse at the port. The Chinese accounts clearly indicate that the port handled passengers. As indicated by a letter written by Maulana Muzaffar Shams Balkhi to Ghiyath al-din Azam Shah (1389-1410 CE) requesting the sultan to arrange for shipping space in Chattogram port for the disciples of the Maulana who were on a pilgrimage (Askari 1956: 190), we may logically believe that Hajj pilgrims had begun to sail for Mecca from Chattogram by the late 14th century CE. However, the fact that the Maulana had to write to the sultan with a note of urgency also hints that such voyages of the pilgrims had not become very common and that the transit facilities for passengers may not have been very comfortable in the late 14th or early 15th century CE.

Notwithstanding the transit facilities for passengers, Chattogram must have become a commercial centre of high repute in the 16th century CE as well. This is testified by Varthema (1928: 79) who praises the city of Banghella (Chattogram) as "the best that [he] had hitherto seen" in circa 1508 CE and found there "the richest merchants [he] ever met with". In 1532 CE, de Barros confirmed Varthema by observing the following, "Chittagong is the most famous and wealthy city of the kingdom of Bengal, on account of its port, which meets the traffic of all that eastern region" (Campos 1919: 113). Chattogram (the City of Bengala) must have been a well-known production centre of cotton textiles, sugar, and "ginger conserve, also of oranges, lemons and other fruits which grow in this land" (Barbosa 1921: 145-147). Varthema (1928: 79) confirms Barbosa's observation on cotton textiles and adds silk textiles to the list. The fact that in 1569 CE Caesar Frederick travelled from Pegu to Chattogram in a ship laden with "Silver and Gold … and no other kind of Merchandize" indicates that the port was the most important centre in Bengal for importing bullion (Purchas 1905: 136). The account of Vincent la Bleau, the French merchant and traveller who arrived in Chattogram (Castigan or Shatigan) in 1575 CE, confirms Caesar Frederick's information that Chattogram was a centre for bullion trade because he (la Bleau) writes of making profit by trading in gold and silver (Ray 1999: 364). The findings of this essay clearly show that between the 2nd century CE and the 16th century CE Chattogram (Chittagong) was an important maritime port in Bengal.

Concluding Remarks

In the preceding chapters of *Maritime Ports in Bengal: 6th Century BCE-16th Century CE* attempt has been made to present maritime ports that operated in Bengal by examining geographical, geological, environmental, literary, archaeological, epigraphic, numismatic, iconographic, and ethnographic evidence. The investigation undertaken by this research traverses a period of over two thousand years and identifies seven maritime ports in Bengal. These are Tamralipti (c. 3rd century BCE to the mid-8th century CE), Gangê (3rd century BCE to the early 4th century CE), Wari-Bateshwar (c. 3rd century BCE to the 3rd century CE), Kotalipara (c. 2nd century CE to the early 8th century CE), Sonargaon (early 14th century CE to the second half of the 15th century CE), Satgaon (early 14th century CE to 1632 CE) and Chattogram (prior to the 2nd century CE to date). Hence, Niharranjan Ray's (1994: 127) opinion, after the demise of Tamralipti, "from the 8th to the 13th century AD, no other commercial centre developed anywhere in Bengal", needs to be revised. It is also highly significant that four of the seven ports located in Bangladesh and these ports functioned one after another from the 3rd century BCE onwards in contrast to a gap observed from the 8th century CE to the early 14th century CE in West Bengal, India. It is also important to note that all the seven ports were located in estuaries and were actually feeder ports.

The importance of these ports lay not so much as entrepôts in the

Indian Ocean trade network. They were more important for their hinterland since they provided vital economic links to the landlocked regions lying in the north-west (Central Asia and Bactrian Greek kingdom), the north (kingdoms in the eastern Himalayas and Cooch Behar), the north-east (Kamrupa, Tripura and China) and the east (Tripura). The maritime trade routes connected Bengal with major ports in South Asia and Southeast Asia. The farthest extent eastward was Fu-nan in the Mekong Delta and westward was Jeddah on the Red Sea. Bengal was never directly linked with Rome or China.

In my pursuit of responses to the problems I have been able to prepare a strong and reliable empirical base and chronological framework that may lead to problem-oriented perusal of future research on maritime ports of Bengal. However, this research still leaves unanswered many important questions. Why were the Greco-Roman sailors and travellers completely silent regarding Tamralipti although Pliny refers to ships sailing from Taprobane to Prasii? Why was Gangê not mentioned in any indigenous literature? Likewise, the port of Gangê appears to 'float' in a vacuum, with no mooring in a political-historical context. What were the ancient names of the ports of Wari-Bateshwar and Kotalipara? Was Wari-Bateshwar the eastern-most outlet of the Mauryan Empire? These are few questions from many more, which, I am afraid, I will only pose but have no answer. The history of eastern Bengal (now Bangladesh) will show fascinating changes in settlement pattern, economic condition and lifestyle of the people as its maritime port changed from Wari-Bateshwar to Sonargaon to Chattogram. Hopefully, this volume will draw enough interest on the merit of its argument and initiate a dialogue among scholars, which will in turn open new vistas for the history of South Asian maritime trade. I acknowledge unhesitatingly that there were more nodal points in Bengal to fecilitate the looping network between the seven ports discussed here and beyond. More research should be carried out on the subject to amend the gap of this volume.

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